

Areawide Planning of
FACILITIES *for*
REHABILITATION
SERVICES

Report of the Joint Committee of the **PUBLIC HEALTH SERVICE**
and the **VOCATIONAL REHABILITATION ADMINISTRATION**
Participating Agency: **Association of Rehabilitation Centers, Inc.**

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service

HV 173 U

Planning Goals

- ◆ To establish and maintain rehabilitation services and facilities at a high level of quality.
- ◆ To provide rehabilitation facilities and services for all types of needs of the physically and mentally disabled and the mentally retarded in all segments of the population in all geographical areas.
- ◆ To develop and maintain coordinated rehabilitation services and facilities.
- ◆ To develop and maintain rehabilitation services and facilities at a high level of maximum effective utilization.
- ◆ To create an increasing awareness of the values of the rehabilitation process.

Areawide Planning of

FACILITIES *for*

REHABILITATION

SERVICES

*Report of the Joint Committee of the Public Health Service
and the Vocational Rehabilitation Administration*

Participating Agency: Association of Rehabilitation Centers, Inc.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service
Washington 25, D.C.

CHARGE TO COMMITTEE

In establishing this Committee to study rehabilitation facilities and services in December 1960, the Public Health Service and the Vocational Rehabilitation Administration assigned it two basic responsibilities:

1. To review, analyze, and evaluate the progress and accomplishments in the planning and development of facilities for rehabilitation services, and
2. To develop principles and guidelines for more effective planning.

The formation of the Committee was a further step in the coordination of planning efforts for specialized facilities within the framework of total health facility planning. Other committees have investigated the various aspects of planning facilities for mental health services, medical schools, and long-term treatment and care. In addition, principles and procedures for planning hospitals and related health facilities on an areawide basis have been developed. A study of tuberculosis hospitals is still in progress, and plans are being developed for the exploration of problems and possibilities of action in other areas of health facility planning.

HV 1715 U

copy one

PUBLIC HEALTH SERVICE PUBLICATION NO. 930-B-2

April 1963

For sale by the Superintendent of Documents, U.S. Government Printing Office,
Washington 25, D.C. — Price 55 cents

LUTHER L. TERRY, M.D., *Surgeon General*
Public Health Service

MARY E. SWITZER, *Commissioner*
Vocational Rehabilitation Administration

Dear Miss Switzer and Dr. Terry:

THE AD HOC COMMITTEE on Planning of Facilities for Rehabilitation Services, sponsored by the Public Health Service and the Vocational Rehabilitation Administration, culminates its activities with the completion of this document. In its endeavors, the Committee had the benefit of the active participation of the Association of Rehabilitation Centers, Inc.

Rehabilitation facilities and services represent effective instruments for the evaluation and treatment of the physically and mentally disabled. Their rapid growth since World War II may be attributed to the increasing awareness of the general public that disability is a national problem and warrants the utmost in community efforts to minimize its impact. Rehabilitation facilities have developed special types of programs in which many evaluative, therapeutic, and adjustment efforts in the medical, psychosocial, and vocational areas have been joined to meet specific needs of the handicapped and disabled. Over the years these joint efforts have been accentuated and rehabilitation services have been expanded and increased. Today, some 200 rehabilitation centers provide comprehensive coordinated services for the handicapped. In addition, hundreds of other facilities and agencies offer or support direct services for the disabled.

In undertaking this study the Committee made an extensive review and analysis of current and historical literature on the planning of rehabilitation facilities and services. Members visited facilities in various sections of the Nation. Prevailing concepts and philosophies as well as the findings of research studies and statistical reports were evaluated.

From these activities, the Committee has developed this report which covers: the meaning of rehabilitation; current patterns, problems, and trends in rehabilitation facilities and services; goals and principles of planning; and techniques for planning and implementation of action. The Committee believes its report will enable personnel of State and Regional Hill-Burton and Vocational Rehabilitation agencies, areawide planning councils, and rehabilitation facilities and organizations to more effectively plan facilities for rehabilitation services.

During the study the Committee became concerned with three areas it did not regard as coming within the scope of this report. These areas are: (1) need for planning in the field of rehabilitation at the national level; (2) detailed evaluation of the progress being made under the rehabilitation category of the Hill-Burton Program; and (3) need for increased research activity in the many and varied socioeconomic and cultural factors affecting the development, use, and support of rehabilitation facilities and services.

On behalf of the Committee, it is my pleasure to transmit our report to the cosponsoring agencies.

Ernest L. Stebbins

ERNEST L. STEBBINS, M.D.,
Chairman.

Joint Committee of Public Health Service and
Vocational Rehabilitation Administration on
Planning Facilities for Rehabilitation Services

ERNEST L. STEBBINS, M.D., *Chairman*
Dean, The Johns Hopkins School of Hygiene and Public Health, Baltimore, Md.

ROBERT N. BARR, M.D.
Secretary and Executive Officer
State Department of Health
Minneapolis, Minn.

MR. F. RAY POWER
*Director, State Division of Vocational
Rehabilitation*
Charleston, W. Va.

MR. CHARLES E. CANIFF
Executive Director
Association of Rehabilitation Centers, Inc.
Evanston, Ill.

PERRY F. PRATHER, M.D.
Commissioner of Health
State Department of Health
Baltimore, Md.

JACK C. HALDEMAN, M.D.
Assistant Surgeon General
*Chief, Division of Hospital and Medical
Facilities*
Public Health Service
Washington 25, D.C.

MR. HENRY REDKEY
Senior Consultant
Rehabilitation Facilities
Vocational Rehabilitation Administration
Washington 25, D.C.

MR. ADRIAN LEVY
*Assistant Commissioner for Vocational
Rehabilitation*
State Education Department
Albany, N.Y.

JOSEPH N. SCHAEFFER, M.D.
Director
Rehabilitation Institute
Detroit 1, Mich.

REV. BRYCE W. NICHOLS
Executive Director
Ohio Valley Goodwill Industries Rehabili-
tation Center
Cincinnati, Ohio

WILLIAM A. SPENCER, M.D.
Director
Texas Institute for Rehabilitation and
Research
Texas Medical Center
Houston, Tex.

MR. WILLIAM K. PAGE
Executive Director, The Kessler Institute
for Rehabilitation
West Orange, N.J.

MR. JOHN M. STACEY
Director
University of Virginia Hospital
Charlottesville, Va.

Contributing Staff

PUBLIC HEALTH SERVICE
Division of Hospital and Medical Facilities
RONALD B. ALMACK ANITA REICHERT JOHN D. THEWLIS

ASSOCIATION OF REHABILITATION CENTERS, INC.
FRANK V. DIGIOVANNA

CONTENTS

	Page
Transmittal Letter	iii
Summary	vii
<i>Chapter I. Meaning of Rehabilitation</i>	<i>1</i>
Dynamics of Rehabilitation	1
Components of Rehabilitation Services	2
Rehabilitation Process	3
<i>Chapter II. Planning Goals and Principles</i>	<i>5</i>
Goals	5
Principles	7
<i>Chapter III. The Planning Process</i>	<i>13</i>
The Planning Organization	13
Basic Planning Procedures	15
Implementing Recommendations	16
Developing Self-Evaluation and Research Procedures	18
<i>Chapter IV. Profiles: Current Patterns and Problems</i>	<i>19</i>
Program Emphasis	19
Administrative Setting	20
Financial Operations	22
Personnel Patterns	25
Utilization	27
Professional and Public Support	28
Some Observations on Planning Problems	30
<i>Appendix I. Scope of Rehabilitation</i>	<i>33</i>
<i>Appendix II. Existing Rehabilitation Programs</i>	<i>37</i>
Federal Government Agencies	38
Voluntary Agencies	43
Areawide Planning Councils for Hospitals and Related Health Facilities	49
Service Agencies	50

<i>Appendix III. The Hill-Burton Program</i>	Page 53
<i>Appendix IV. Tables and Exhibits</i>	56
<i>Appendix V. Architectural Plans</i>	65
<i>Appendix VI. Glossary of Terms</i>	82
References.....	86
Additional Bibliography.....	88

Tables

*Table
number*

1. Prevalence of Chronic Illness.....	56
2. Prevalence of Chronic Conditions.....	57
3. Rehabilitation Center Projects, Approved Under the Hill-Burton Program Through December 31, 1962.....	58
4. Average Cost Per Inpatient Day in Five Inpatient Centers by Type of Services as of the Study Period.....	59
5. Average Cost Per Patient Visit by Service Department as of the Study Period.....	59
6. Percent of Total Fees Paid by Third Parties by Source of Payment for a One-Year Period.....	60
7. Percent Distribution of Operating Income by Type of Support and Income for a One-Year Period.....	60
8. Specialties of Medical Director in Rehabilitation Centers Reporting Such a Staff Member.....	61
9. Supervision in Rehabilitation Centers by Type of Service and Type of Personnel.....	61
10. Ratio of Budgeted Unfilled Positions (B.U.P.) to Total Positions....	62
11. Percent Distribution of Patients by Distance of Patients' Permanent Residences From Center as of the Study Period.....	64

Architectural Plans

<i>Plan Number</i>	<i>Page</i>
1. Multiple Disability Rehabilitation Facility including Nursing Unit (Master Plan).....	66
2. Rehabilitation Gymnasiums.....	68
3. Hydrotherapy, Thermotherapy, and Massage.....	69
4. Occupational Therapy.....	70
5. Prevocational Units.....	71
6. Activities of Daily Living.....	71
7. Suggested Layout for Hearing and Speech Facilities.....	72
8. Artificial Appliance Facilities—Type A and Type B.....	73
9. Typical 4-Bed Room and Toilet Facilities.....	74
10. The Rehabilitation Center, Evansville, Ind.....	75
11. Texas Institute for Rehabilitation and Research, Houston, Tex.—Main Floor.....	76
12. Texas Institute for Rehabilitation and Research, Houston, Tex.—Base- ment Floor.....	77
13. Ohio Valley Goodwill Industries Rehabilitation Center, Cincinnati, Ohio.....	78
14. Rehabilitation Department, University Hospital, Seattle, Wash.....	80
15. Rehabilitation Center, Charlottesville, Va.....	81

Summary

MEANING AND SCOPE OF REHABILITATION

REHABILITATION is the process of restoring the disabled to optimal physical, mental, social, vocational, and economic usefulness. The process provides services to the handicapped beyond those available from his own resources. Rehabilitation calls for long-range planning, and action utilizing a wide spectrum of medical, psychosocial, vocational and educational services coordinated and integrated into specific programs designed to meet individual needs. An important factor in successful rehabilitation is the personal motivation of the disabled.

The broadening scope of the rehabilitation process and refinements in rehabilitation techniques are bringing benefits to an increasing number of disabled persons. Additional facilities and services are needed, however, to serve many others who could benefit from some type of assistance. According to the U.S. National Health Survey, during the 12-month period ending June 1960, 7.7 percent of the population reported an inability or reduced ability to work, keep house, or go to school, due to chronic illness or impairment. The Vocational Rehabilitation Administration estimates that approximately 2.2 million persons 14 years of age and older are in need of and would benefit by vocational rehabilitation.

Many agencies, both private and public, are engaged in rehabilitation. Their activities include support of direct services, operation of rehabilitation centers and treatment facilities, and grants for research, demonstration, and training. Many areawide planning agencies for hospitals and related health facilities are giving consideration to the inclusion of rehabilitation services and facilities within their planning programs. Several service organizations and agencies interested in the problems of rehabilitation provide consultation and resource assistance in all areas of rehabilitation.

PLANNING GOALS

PUBLIC INTEREST in the growing need for rehabilitation services and facilities is increasing. Planning is necessary to capitalize on this interest through the coordination of time, effort, and money of individuals, organizations, and agencies for maximum attainments with minimum waste. Goals are essential to give realistic and effective direction to planning efforts. The major goals for planning facilities for rehabilitation services are:

- ◆ To establish and maintain rehabilitation services and facilities at a high level of quality.

- ◆ To provide rehabilitation facilities and services for all types of needs of the physically and mentally disabled and the mentally retarded in all segments of the population in all geographical areas.
- ◆ To develop and maintain coordinated rehabilitation services and facilities.
- ◆ To develop and maintain rehabilitation services and facilities at a high level of maximum effective utilization.
- ◆ To create an increasing awareness of the values of the rehabilitation process.

PRINCIPLES FOR PLANNING

BASIC PRINCIPLES essential to constructive action in planning facilities for rehabilitation services include:

- ◆ Planning of facilities and services should be coordinated with other aspects of community development.
- ◆ Provision for rehabilitation facilities and services should be included in area-wide programs for planning of hospitals and related health facilities.
- ◆ Planning of facilities and services should involve participation of governmental, voluntary, and other agencies connected with rehabilitation.
- ◆ Programs for the prevention of disability should be planned concurrently with programs to provide rehabilitation services.
- ◆ Rehabilitation services should be planned to meet the requirements of the rehabilitation process, thereby assuring continuity and individualization of services.
- ◆ In areawide planning, a complete range and proper balance of component services of the rehabilitation process should be provided to meet the needs of the disabled.
- ◆ Planning should be based on the rehabilitation needs of the disabled rather than the availability of financial support.
- ◆ Rehabilitation facilities should be programed within the limits of existing and potential resources of the planning area.
- ◆ Adequate data should be accumulated to provide a base for quantitative decisions and evaluative interpretations and judgments as to services and facilities needed.
- ◆ A written program of needed rehabilitation services should be developed as a basis for planning rehabilitation facilities.
- ◆ The feasibility of upgrading and expanding existing facilities and services should be determined prior to the development of new facilities and services.
- ◆ Programs should be planned to recruit and train an adequate number of needed qualified professional personnel in an environment providing balanced training emphasis and educational opportunities.
- ◆ Appropriate component services of the rehabilitation process should be developed in general hospitals proportionate to their size and staff and to the extent of the needs of the disabled within their service areas.

- ◆ Rehabilitation programs and facilities, including workshops, should be planned for the emotionally handicapped and the mentally retarded.
- ◆ The feasibility of planning independent services and facilities should be determined by: (1) extent of needs of the disabled to be served; (2) availability of sponsors, referrals, and adequate financial support; and (3) capacity to establish firm working affiliations with hospitals and other service agencies.
- ◆ Where feasible, facilities should be planned to provide inservice training and opportunities for research by the professional staff.
- ◆ Rehabilitation services should be planned to meet or exceed existing standards and to provide a program of continuing evaluation and improvement.
- ◆ Facilities should be located in more densely populated areas for ready accessibility.
- ◆ Planning groups should develop procedures for research and ongoing self-evaluation as an integral part of the planning process.

THE PLANNING ORGANIZATION

PLANNING OF REHABILITATION facilities and services usually can be made a responsibility of areawide planning agencies as visualized in the report, "Area-wide Planning for Hospitals and Related Health Facilities" (1). Occasionally, appropriate official State agencies (State Hill-Burton agency and State Vocational Rehabilitation agency) may find it desirable to stimulate the development of an intrastate or interstate planning group for planning rehabilitation facilities and services. Such a special rehabilitation committee should include personnel of organizations, agencies, and institutions interested and involved in rehabilitation.

As noted in the areawide planning report, areawide planning agencies can help to:

- ◆ Correct deficiencies in existing facilities and services.
- ◆ Stimulate needed construction and discourage construction not conforming to areawide needs.
- ◆ Assure more effective use of areawide funds by avoiding unnecessary duplication of highly specialized, infrequently used expensive facilities.
- ◆ Improve care for the acutely ill, chronically ill, and disabled by developing effective interrelationships among facilities and services.
- ◆ Develop an orderly distribution of all facilities in keeping with projected population characteristics and the overall areawide development.
- ◆ Encourage individual facilities to define and carry out their objectives and projected roles in relation to other facilities, services, and areawide needs.

To assure that specialized knowledge of rehabilitation needs will be available to it, the areawide planning agency should establish an advisory technical committee composed of voluntary and official agencies in the rehabilitation field. Members of such technical committees should have a broad understanding of the rehabilitation field as a whole, as well as intimate knowledge of their specialties.

The planning agency should have an adequate professional staff, broadly conversant with the various phases of the rehabilitation process and experienced in socioeconomic and health facility planning. Use of experienced consultants in special situations may also be desirable. The professional staff, advisory technical committee, and consultants should work together in all phases of the planning process.

State Hill-Burton agencies should officially recognize areawide planning organizations. These groups should work closely together so that areawide planning proposals can be incorporated into the State Hill-Burton plan. To assure effective integration of rehabilitation services in areawide planning efforts, State and Regional Hill-Burton and Vocational Rehabilitation personnel should be involved in all areawide planning activities.

BASIC PLANNING PROCEDURES

THE COLLECTION, TABULATION, and analysis of information on population and community characteristics, disabling conditions, existing rehabilitation services, and health and welfare patterns and trends in the planning area are primary steps in planning rehabilitation facilities and services. Collection of pertinent data is complicated by the lack of definitive criteria for measuring rehabilitation needs. This makes it necessary to utilize information based upon empirical judgments of knowledgeable persons. Existing sources of information should be utilized to the fullest extent possible to develop a series of profiles of existing conditions in the area and estimates of current and potential demand for rehabilitation services. Special studies should be undertaken only when existing data do not provide satisfactory or adequate information.

Careful evaluation of needs is the heart of planning for rehabilitation services and facilities. It is the foundation for the development of realistic recommendations for upgrading and expanding existing programs or for developing new services and facilities. Matching the extent of need for rehabilitation services with the facilities and services currently available will reveal inadequacies in existing patterns. In matching programs to needs, planning groups should establish both short-range and long-range goals. Flexibility in adjusting goals to changing conditions is vital to the planning process.

IMPLEMENTING RECOMMENDATIONS

IMPLEMENTATION OF RECOMMENDATIONS for planning rehabilitation services and facilities includes (a) determining population and disability groups to be served; (b) stimulating the development of programs for the prevention of disability; (c) assisting sponsors to develop specific programs to carry out recommendations; and (d) developing ongoing self-evaluation and research procedures.

The planning group should distinguish between the determination of rehabilitation needs and the establishment of realistic demands for services which can adequately be met at the current level of financial and community support.

Recognized sponsors should receive assistance from planning groups in establishing a realistic program based upon sound knowledge as to the demands

for rehabilitation services, and in gaining support of the medical profession and key lay leaders for this program. Planning groups will wish to aid the sponsor in securing adequate and sound financial support and in determining the availability of qualified and experienced personnel, both of which are essential to high quality and efficient operation of facilities. Sponsors should also be encouraged by the planning groups to develop physical plants adequate for present needs and flexible for future changes.

CURRENT PATTERNS AND PROBLEMS

A WIDE VARIETY of patterns exists in program emphasis, administrative settings, staffing, and professional and community support of rehabilitation services and facilities. The programs of medically oriented rehabilitation facilities accent physical restoration. The primary focus of vocationally oriented facilities is on vocational services with well-developed psychosocial services. Psychosocially oriented facilities concentrate attention on individuals with long-term or permanently disabling psychological or psychiatric disorders. Administrative settings exert a great influence on program emphasis, type of clientele served, and financial support available. For example, rehabilitation services may be found in educational institutions, general and mental hospitals, independent facilities, or rehabilitation workshops. In any of these settings, the emphasis may be on one or more disabilities with the comprehensive center providing the broadest program.

Chapter I

Meaning of Rehabilitation

REHABILITATION IS OUR SOCIETY'S unique process of restoring the dignity of its disabled members and of harvesting the products of their talents. It involves the utilization of recognized medical, psychosocial, and vocational services singly or in coordinated combination to meet the requirements of the physically and mentally handicapped.

Rehabilitation of the disabled is the respon-

sibility of the involved individual, his family, and his community. It calls for planning, action, and personal motivation. Rehabilitation requires the varied skills of physicians, nurses, physical and occupational therapists, social workers, psychologists, vocational counselors, teachers, and many others. It is carried out in physical facilities designed to enhance the provision of these services.

Dynamics of Rehabilitation

REHABILITATION is a dynamic process of re-establishment of the disabled person's capacity to sense and participate in his environment and communicate with others; to adapt to the physical world, which includes ability to tolerate physical energy expenditure while resuming activities of daily living; and to utilize fully his intellectual, social, and vocational potentialities (2). The rehabilitation process assumes the primacy of the disabled individual and the development of a definitive program for treatment, personal help, and guidance designed to meet his needs. Comprehensive services provided by many types of specialists participating as a team must be available to carry out this process. The kind, timing, and extent of services employed will vary with the needs of the disabled person. Each service will receive major or minor emphasis depending upon the circumstances and nature of the needs of the individual involved, and the appropriate time for its usage.

Rehabilitation is expensive since it involves trained and experienced personnel as well as costly equipment, often for long periods. Third-party support, which frequently lacks stability, is the major source of income. This factor, combined with rising costs, produces many financial problems. Resolution of these problems depends upon establishing a reasonable balance between fees for services and community and governmental support.

Rehabilitation facilities face difficulties in obtaining and keeping sufficient qualified and experienced professional personnel. This situation stems from the failure to attract and train sufficient personnel, and, in some cases, from ineffective personnel and salary policies within facilities.

Utilization of rehabilitation facilities is influenced by accessibility to the population served, community support and understanding, the support of the medical profession, and demographic and socioeconomic characteristics of

the service area. Facilities emphasizing physical restoration generally have a higher utilization rate than psychosocially or vocationally oriented facilities. Rehabilitation facilities with full-time medical direction and good third-party support usually experience satisfactory use rates, particularly if their physical plants are adequate.

Physicians are a major source of referrals to facilities and a strong guiding force in the rehabilitation program of the disabled. The effectiveness of their support can be increased through encouraging their active involvement in programs resulting in recognition of the values of rehabilitation and better understanding of the functions of services and facilities. Public support is as necessary as physician support. This support depends upon the imagination, drive, and influence of strong personalities properly channeled into positive action.

Although the past few years have seen the growth of more facilities and services as well as increased financial, professional, and community support, the pace is too slow to meet the needs of the multitude of persons who could benefit from rehabilitation. Coordination of rehabilitation services, particularly through

realistic and specific referral and follow-up procedures, would materially increase the effectiveness of the rehabilitation process.

Participation in the rehabilitation process may produce many different results, each effective in meeting the needs of the disabled person involved. For some of the handicapped, participation may mean learning to take care of themselves. For others it may include, singly or in combination, such things as medical rehabilitation including physical restoration, vocational rehabilitation involving evaluation and job retraining, or personal and social adjustment in meeting the demands of everyday living.

Long-range planning is essential to rehabilitation programs for the handicapped. The goal of this long-term planning is "to achieve maximum adjustment of the disabled person * * * when formal rehabilitation processes are ended" (3). Realization of this goal depends upon the disabled individual becoming motivated sufficiently to follow through and assume personal responsibility for continued or sustained growth. Long-range planning must provide the mechanisms to stimulate this motivation.

Components of Rehabilitation Services

THE COMPONENTS OF REHABILITATION services include medical management in its broadest sense including complete evaluation, psychosocial evaluation and adjustment services, and vocational evaluation and retraining under appropriate medical and other professional supervision. (See Appendix VI for glossary of rehabilitation terms.)

Medical Services

Medical services include evaluation to determine the potentials of the remaining capacities of the disabled, their activity tolerance, and the limitations imposed by remaining pa-

thology. They cover medical, surgical, and restorative treatment involving physical therapy and occupational therapy to assist the handicapped in achieving maximum independence of action. Nursing care is provided and, where mental or emotional problems are involved, psychiatric screening and treatment are needed.

Within the medical services available to the disabled are those concerned with activities of daily living. These include an evaluation of the functional potentials and limitations of the disabled as they apply to everyday living. Services for activities of daily living cover instructions in specialized exercises, in the use of self-help devices, and in the simple self- or family-administered treatments, as well

as instructions related to the functions of walking, standing, hygiene, dressing, eating and homemaking.

Medical services may also include recreational therapy, speech therapy, audiological services, and prosthetic and orthotic services.

Social Services

Social services consist of social evaluation, social case work, and social group work. All of these services are utilized to assess the social effects of disability on the patient and on his family and community life. In social services the role of the family in the care and treatment of the disabled is carefully analyzed. The family and the patient are counseled as to their mutual responsibilities and interdependence.

Psychological Services

Psychological services include evaluations to ascertain the various factors conditioning the rehabilitation potential or the limitations of the disabled individual. These services are closely related to psychiatric services involving screening and treatment. Psychological services also cover counseling on problems of personal adjustment of the disabled to the family and the community. The potentials of the family's role in the rehabilitation program for

the disabled person are carefully analyzed, evaluated, and established during such counseling.

Vocational Services

Vocational services provide for evaluation to relate the aptitudes of the disabled person to his capacities. They also provide for the establishment of vocational goals. Vocational services include counseling, training, and re-training. Trial employment within a rehabilitation workshop and selective placement in business and industry fall within the scope of vocational services.

Education

Educational services supplied within the framework of the rehabilitation process provide for schooling, under regular teachers, for school age children and adults whether institutionalized or homebound. Specialized educational services for the disabled may be provided to cover problems imposed by their condition. In addition, emotional adjustment services and vocational services are frequently a part of an educational program. Educational services also cover communication and adjustment programs. In some instances, educational activities include programs for adults in basic subjects related to vocational adjustment.

Rehabilitation Process

THE COMPONENTS of rehabilitation services are melded into the rehabilitation process when the disabled individual must have assistance that is (1) beyond his personal capacities and resources to meet and solve the problems of maximum potential of personal, social, and economic adjustment and (2) beyond the services available in his usual daily experiences. Such assistance continues through a period during which significant and observable improvement takes place.

Many of the components of rehabilitation services are used daily in medical, socioeco-

nomic, and educational situations which do not involve the rehabilitation process. For example, physical therapy may be utilized in treating medical patients in general hospitals. Psychosocial services are fundamental parts of the programs of most welfare agencies. The basic features of special education are fundamental to all educational programs. Vocational evaluation, counseling, and placement are common practices in modern business and industry.

To implement the rehabilitation process, the component services must be planned and carried out within an agency or institutional

setting designed expressly for the physically and/or mentally disabled, or the mentally retarded. They should be contained in a prescribed physical locale established, designed, and operated for these specific purposes. The most highly developed facility is the rehabilitation center providing comprehensive medical, psychological, social, and vocational services in a coordinated program designed to meet the individual needs of the physically and men-

tally handicapped or the mentally retarded. Some components are also contained in rehabilitation facilities such as a department of physical medicine and rehabilitation or other specialized programs in a general or mental hospital, in an independent inpatient and/or outpatient treatment center, in a rehabilitation workshop, in a speech and hearing center, and in a single disability center for the blind or the deaf.

Chapter II

Planning Goals and Principles

THE NEED for increased services and facilities in the face of the many pressing problems common to the rehabilitation effort calls for planning. Planning is a dynamic and continuous

process for translating available resources into effective patterns of action. The process consists of a series of activities for developing, releasing, and guiding cooperative effort.

Goals

GOALS ARE ESSENTIAL to attract the attention, interest, and participation of individuals, groups, organizations, and agencies. They serve as the base for evaluations and interpretations of program and facility needs, and give direction to recommendations for courses of action. The goals for planning rehabilitation programs must encompass the development and maintenance of high quality services, an extension of coverage of the disabled, efficient utilization of facilities, increased coordination of program efforts, and creation of an increasing awareness of the values of the rehabilitation process. Some of these goals are discussed below.

1. To establish and maintain rehabilitation services and facilities at a high level of quality.

The establishment and maintenance of rehabilitation services and facilities at a high level of quality is essential. Services of low quality may perpetuate the disabling conditions of the handicapped rather than improve them. Upon the quality level depend utilization, financial backing, and professional and community support. Physicians and health and welfare agencies will make referrals in direct

proportion to their judgments as to the quality of the services available. Interest and support of third-party payers will be affected in the same manner.

Conversely, high quality of service is affected by the adequacy of financial support and by the degree of professional and community support the institution engenders. Quality depends also upon the availability of trained and experienced personnel. Planning is needed to channel financial support, trained personnel, and professional and community enthusiasm into realistic efforts to maintain quality services.

2. To provide rehabilitation facilities and services for all types of needs of the physically and mentally disabled and the mentally retarded in all segments of the population in all geographical areas.

Acceptance of the philosophy of the rehabilitation process entails many responsibilities and obligations. It presumes that continuing efforts will be made by planning groups to provide needed services and facilities to all segments of the population in all geographical areas. It also presumes interest in the optimal coverage of all disabilities, physical and mental.

Assumption of this responsibility calls for efficient planning to establish a realistic assessment of the need for services for the handicapped. It also calls for the development of programs to fill needs.

Extensive consideration should be given to the demographic projections in the area and to the geographic origin of potential recipients of services to insure effective distribution of facilities.

More attention should be given to the development of programs and services for disabilities, conditions, and age groups which have been previously neglected (e.g., disability—emotionally disturbed; condition—mentally retarded; age group—children and young adults). A complete range of services should be available to meet total potential needs of the disabled persons.

Urban renewal programs, population development along strips of super-highways connecting a number of large metropolitan centers, the development of new industrial areas, and changing cultural and economic patterns of whole communities require careful analysis in terms of the distribution of facilities. Thus, rehabilitation planning must take place within the context of overall health and community planning and must be consistent with changing needs and conditions.

3. To develop and maintain coordinated rehabilitation services and facilities.

A broadly coordinated planning effort has the effect of unifying and giving direction to the various interests of areawide agencies. It improves services and provides for a better balance of services consistent with immediate requirements and future needs. It helps stem the rise of duplicate services and reveals the gaps resulting from uncoordinated efforts.

Sound planning can help to distinguish between the need for new services as opposed to the need for new physical plants. Also, where feasible, existing services and facilities can be upgraded and expanded for less than the cost of developing new services and constructing new facilities.

Coordinated planning should preclude the

unnecessary development of specialized centers in terms of age or disability groups served. Planning helps combine fragmented and isolated services into a more purposeful, continuing, and economically sound facility or program.

4. To develop and maintain rehabilitation services and facilities at a level of maximum effective utilization.

Maintenance of services and facilities at a level of maximum utilization demands the efficient use of resources available for rehabilitation. A practical assessment of the needs of the area and an analysis of those needs in terms of required rehabilitation services is basic to efficient utilization of these resources.

Close cooperation with referring sources is essential to stable utilization. Good planning calls for information on the willingness of physicians and agencies to make referrals. It also considers the programs of agencies: their budgetary limitations; operating policies; size and types of clientele served; and their ability to meet expanding and new requirements. Proper use of this knowledge fosters better working relationships between rehabilitation facilities and potential referral sources and results in a high volume of referrals and increased utilization.

5. To create an increasing awareness of the values of the rehabilitation process.

Community planning is one of the components necessary, along with demonstration of services, to help develop an awareness of the values of the rehabilitation process to the disabled individual, his family, and the community. The education of the community as to the extent to which many apparently permanently disabled people can become productive again or attain a measure of self-care, and the social and economic benefits of their rehabilitation is a major undertaking. Adequate planning will produce a better understanding of the economics of the rehabilitation process. From this will come better and more effective community support.

Of even greater importance is the recognition of the personal and social values of rehabilitation which realistic planning can bring about. In such planning, attention is given to the establishment of programs designed to meet the individual needs of the disabled rather than

to fulfill objectives and goals of organizations and agencies. A complete spectrum of the required services is developed. Fragmentation of assistance (resulting in the minimum of help and a maximum of confusion for the seriously disabled individual) is curtailed.

Principles

SOUND AND APPROPRIATE basic principles are fundamental in any planning program. These principles must be realistic, timely, and productive of tangible results. The following principles are fundamental to constructive action in planning rehabilitation services and facilities.

1. Planning of facilities and services should be coordinated with other aspects of community development.

The development and utilization of rehabilitation facilities will be affected by many aspects of community life, such as trends in population growth and shifts in age composition; changes in land utilization; and patterns of commercial and industrial growth. Rehabilitation services and facilities may also be influenced by any shift in the content of programs of supporting health, education, and welfare agencies. Practical and realistic planning calls for an understanding of, and coordination with, all potentially influencing factors.

2. Provision for rehabilitation facilities and services should be included in areawide programs for the planning of hospitals and related health facilities.

The component services of the rehabilitation process should be available at the time and to the extent needed. The inclusion of rehabilitation facilities and services within the areawide planning programs for hospitals and related health facilities is more effective than separate and independent planning.* Through such programs, services can be developed within

the type of administrative setting best suited to provide them, a wider range of disabilities can be served, and more disabled persons can be benefitted. The overall costs to the community should thus be held at minimum through curtailment of overlapping and duplication of services.

3. Planning of facilities and services should involve participation of governmental, voluntary, and other agencies concerned with rehabilitation.

All governmental, voluntary, and other agencies concerned with rehabilitation should work together in the planning of rehabilitation services and facilities at all levels: local, State, regional, and national. They should actively promote the formation of areawide planning organizations. They should also encourage the inclusion of rehabilitation facilities and services within the framework of programs of existing planning groups. These agencies can contribute to areawide planning activities by providing needed technical resources, assistance, and consultation. Members of these organizations should be invited and be willing to serve as members of the Board of the planning agency.

Through cooperative effort adequate rehabilitation programs for the widest possible coverage of disabilities can be developed and plans covering several geographical areas can be

* The principles and techniques of areawide planning as developed by the Joint Committee of the Public Health Service and the American Hospital Association are applicable to the planning of facilities for rehabilitation service. See reference (1).

coordinated. Effective use of available funds to support construction and also the operation of needed facilities and services can be insured through acceptance, adoption, and implementation of recommendations of the planning council.

4. Programs for the prevention of disability should be planned concurrently with programs to provide rehabilitation services.

The incidence and extent of many conditions resulting in long-term or permanent disability can be minimized through preventive measures. Programs for early diagnosis and treatment of potentially disabling conditions can lessen the need for rehabilitation services, e.g., cardiovascular accidents and various non-musculoskeletal conditions. Accident prevention and the development of safety devices to prevent accidents or minimize their effects can also reduce this need.

The prevention or alleviation of disability will produce many benefits. Individuals, their families, and communities will be spared immeasurable physical, mental, and emotional damage. The total costs of rehabilitation will be greatly reduced. The cost of preventive programs—their planning, development, and implementation—is far less than the total cost of rehabilitation of the disabled.

5. Rehabilitation services should be planned to meet the requirements of the rehabilitation process, thereby assuring continuity and individualization of services.

The planning of rehabilitation services and facilities should be based on the rehabilitation process to make the best use of available financial and personnel resources. Coordinated services concentrate, and make more effective, the efforts of the professional staff. Since personnel costs account for the major portion of rehabilitation expenditures, this concentration produces an economy of operation. Economical operation makes the financial resources available for rehabilitation go further. Such planning will also create better understanding on the part of physicians, community organiza-

tions and agencies, and community leaders as to the role of rehabilitation in providing needed assistance to the physically and mentally disabled.

6. In areawide planning, a complete range and proper balance of component services of the rehabilitation process should be provided to meet the needs of the disabled.

Provision for complete range and proper balance of services requires practical and realistic cooperation and understanding among all agencies providing or supporting rehabilitation services in any given geographical area. Provision of this completeness and balance does not imply that all of the component services of the rehabilitation process should be found in all rehabilitation facilities. Neither does it mean that all services should be necessarily located within the planning area. Some services may be more effectively provided in adjacent areas. Such a situation should be carefully established by the planning group. Completeness and balance does mean, however, that the services required by the disabled should be readily available and accessible.

7. Planning should be based on the rehabilitation needs of the disabled rather than the availability of financial support.

The primary objective in planning rehabilitation facilities and services should be to meet the needs of the disabled. This objective should not be influenced or controlled by current policies of sponsoring agencies or the amount of funds available for support. Under this concept, planning groups may find it feasible to develop both long-range and short-range goals. In setting long-range goals, the full spectrum of services and facilities required to meet rehabilitation needs should be planned. Long-range planning should be both broad-gauged and general in character to permit flexibility to meet changing conditions and changing times.

The establishment of short-range goals should be based on a knowledge of the current and potential use of facilities and service. This effective demand will be closely related to the

referral policies of existing agencies, their policies of financial support, and their understanding of the scope of rehabilitation needs in the planning area.

To the extent possible, the planning groups should work with existing agencies and programs through vigorous information and educational activities to change their attitudes and redirect their policies so as to evoke their firm support for a program that meets the full rehabilitation needs in the planning area.

8. Rehabilitation facilities should be programed within the limits of existing and potential resources of the planning area.

Sufficient financial backing must be available to meet regular operating costs, capital outlays, and expansion. Services and facilities should be programed within the capacity of the area to provide adequate support in these three categories. Financial assistance from third-party payers should be carefully determined to permit an evaluation of the potential help from these sources on the basis of realistic appraisals rather than promises.

Consideration should be given to the current and potential availability of professional and technical personnel to insure adequate and effective staffing of needed programs. Proper staffing is essential to the maintenance of a high quality of services. Stimulating and sustaining the interest and participation of the medical profession and community leaders also depend on proper staffing.

The planning of rehabilitation services should provide for a broad involvement of practicing physicians and community organizations and leaders working together in the total rehabilitation process. Steps should be taken to keep these individuals and groups fully informed about the rehabilitation services available for use. To assure continued support, effective communication should be maintained with community groups during and after planning.

9. Adequate data should be accumulated to provide a base for quantitative decisions and evalua-

tive interpretations and judgments as to services and facilities needed.

The soundness of quantitative decisions and the effectiveness of evaluative interpretations in the planning of rehabilitation services and facilities are contingent upon the adequacy of accumulated data. The data should be sufficient to permit planning groups to distinguish between the broad needs for rehabilitation services and the immediate effective demand for services and facilities. Knowledge of the broad needs is essential to development of long-range goals. Information as to the effective demand determines the scope of programing currently required for services and facilities. The data should provide bench marks for interpreting potentials for expansion and upgrading of existing services and facilities. They must also permit determination of the resources available within the area to maintain quality programs at efficient levels.

10. A written program of needed rehabilitation services should be developed as a basis for planning rehabilitation facilities.

The type of physical plant needed will depend upon the rehabilitation services required within the planning area. Prior to planning the facility, decisions must be made as to whether the needed services should encompass the total rehabilitation process or provide only a limited number of components, e.g., physical restoration, vocational evaluation, and counseling services. The decisions regarding the scope of services will depend upon their appropriateness for managing the disabling conditions of the people to be served. These decisions should form the basis for an areawide program.

11. The feasibility of upgrading and expanding existing facilities and services should be determined prior to the development of new facilities and services.

An evaluation of existing facilities and services should be an integral part of the planning activity. New services and facilities should be implemented only where it is impractical, inefficient, and uneconomical to ex-

pand and upgrade existing services and facilities. Sponsors of services and facilities capable of expansion and upgrading should be urged to extend or improve their programs to meet the rehabilitation needs of the area. Proposals for additional programs and facilities should be carefully reviewed in the context of needs, existing services, and the acceptability of proposed programs by the community.

Facilities and services that are unsuitable or in excess of apparent community needs should be recommended for elimination or conversion to other more appropriate uses.

12. Programs should be planned to recruit and train an adequate number of needed qualified professional personnel in an environment providing balanced training emphasis and educational opportunities.

Programs and facilities for training an adequate number of needed qualified professional personnel are urgently needed. In planning such facilities provision should be made for: (1) the training of personnel; (2) the availability of the full spectrum of components of rehabilitation services: medical, psychosocial, vocational, and educational; (3) services for multiple disabilities; and (4) opportunities for research.

Priority should be given to facilities located in a setting whereby students may have adequate opportunities for training. Such settings would include a university having a medical school, a rehabilitation center, a teaching hospital, and a majority of the following: school of physical therapy, school of occupational therapy, school of social work, department of psychology, vocational rehabilitation counselor curriculum, school of speech therapy, and a school or department of education offering courses in special education. The area for which training facilities are planned should have good potential for: (1) recruiting a desirable number of students; (2) providing a sufficient number of rehabilitants in all types of disabilities; and (3) providing adequate financial, professional, and community support.

Effective rehabilitation of the disabled depends in large measure upon an efficient team approach by the professional personnel re-

quired to carry out the individually designed program for each handicapped person. In view of the importance of the team approach, the educational and clinical training program for each discipline involved in the rehabilitation process should be closely correlated with the training programs for all other disciplines. In addition, the training programs for physicians should provide considerable experience in rehabilitation. This will promote better understanding of the nature, scope, and function of the rehabilitation process.

13. Appropriate component services of the rehabilitation process should be developed in general hospitals proportionate to their size and staff and to the extent of the needs of the disabled within their service areas.

The extent of the component services to be provided by general hospitals should be determined by: (1) size of geographical service area; (2) size of hospital; (3) potential rehabilitation patient load; (4) availability of existing rehabilitation services within the area; (5) ability to maintain an adequate professional rehabilitation staff; and (6) adequacy of financial support for the services to be rendered. These services should be provided on both an inpatient and outpatient basis and should be administered as an organized separate department or as a unit affiliated with the hospital.

Small general hospitals should provide physical restoration services and psychosocial services within the concept and framework of the rehabilitation process. Vocational services should be provided where there is a demonstrable need and qualified personnel are available. These hospitals, as well as hospitals in rural communities, should have definitive procedures for referring patients to facilities that can meet specific patient needs or provide comprehensive services.

14. Rehabilitation programs and facilities, including workshops, should be planned for the emotionally handicapped and the mentally retarded.

With the growing emphasis on social psychiatry and the philosophy that patients are

able to respond positively to greater freedom, there is a greater need for rehabilitation programs for the emotionally handicapped and mentally retarded. The therapeutic value of work and the need for individualized "prescriptions" are as important in the rehabilitation services for these disabled individuals as in the rehabilitation work assignments made during the patient's hospitalization. Rehabilitation programs and workshops offer the opportunity for the mentally handicapped to learn new skills or regain competence in old ones. They can be the stepping stone for readjustment into family and community life. They can also represent the start for gainful employment. Employment opportunities for the mentally retarded in sheltered workshops for training and long-term sustaining opportunities are essential if these handicapped persons are to return to or remain in community life.

15. The feasibility of planning independent services and facilities should be determined by: (1) extent of needs of the disabled to be served; (2) availability of sponsors, patient referrals, and adequate financial support; and (3) capacity to establish firm working affiliations with hospitals and other service agencies.

The decision to develop a free-standing facility should be undertaken only after a careful study of the area has been made by an area-wide planning agency or special rehabilitation planning group.

16. Where feasible, facilities should be planned to provide inservice training and opportunities for research by the professional staff.

New developments in all areas of rehabilitation make it imperative that personnel of existing facilities and others who serve the disabled, such as physicians, have an opportunity to keep up to date through inservice training programs. The need for research opportunities is equally important. Many areas of care and treatment of the disabled need further and continued investigation. Administrative functions also are demanding attention.

In planning facilities and services, the planning group should determine where it is feasible to encourage the development of programs for inservice training and research and the physical plant essential to house such programs. Feasibility should be determined on the basis of: (a) availability of clinical material; (b) professional staff to serve in a teaching or research capacity; and (c) availability of adequate financial support. Planning groups should discourage the development of inservice training and research in facilities that cannot meet acceptable standards in these areas.

17. Rehabilitation services should be planned to meet or exceed existing standards and to provide for a program of continuing evaluation and improvement.

Standards for rehabilitation services and facilities are essential to effective planning. These standards should cover operation, maintenance, and construction. Facilities should be planned to meet or exceed any minimal requirements which may already exist for accreditation or eligibility for licensure or grants-in-aid or loan programs. Where accreditation or licensure standards are lacking, planning groups should stimulate interest in and support for their development.

The standards accepted by the planning groups should be recommended for adoption by all rehabilitation facilities in the area. While immediate conformance with such standards may not be possible, demonstrated progress toward compliance with standards should be required as a condition for continuing participation by the facility in areawide planning.

In developing standards, recognition should be given to the need for rehabilitation services aimed at facilitating the processes of restoration and adjustment of the disabled to an optimum level of function.

Standards should require that the organization and control of the facility providing rehabilitation services be invested in a governing body through its constitutional charter. They should call for the development of rehabilitation services of such quality and so organized

as to constitute an effective program. Standards should provide that facilities be staffed by competent personnel, with ethical attitudes and special qualifications in the various phases essential to the success of the rehabilitation process.

18. Facilities should be located in more densely populated areas for ready accessibility.

Rehabilitation facilities should be planned for availability to the population to be served and for accessibility to the professional personnel required for adequate staffing. Facilities should be located so as to require a minimum of travel time to and from the residences of the disabled. Availability and cost of transportation should be one of the criteria in measuring accessibility. Careful consideration also should be given to the distribution pattern of needed professional personnel. Locating a facility in small communities some distance from urban centers not only makes it difficult for the disabled to use, but also creates problems in securing the medical and other professional personnel needed to carry out the rehabilitation programs. For physicians and other personnel, location is also a matter of holding travel time to a minimum. Since many physicians treat only a few of the disabled individuals, inconvenience in terms of length of travel time or

parking tends to curtail the use of rehabilitation services.

Facilities should be located to permit effective coordination and interrelationships with other related health and socioeconomic services. Such arrangements facilitate the development of cooperative relationships and help assure both the availability of necessary medical and other related competencies and accessibility to appropriate facilities where specialized techniques are practiced. Location of facilities should be based not only on the present distribution of population, but also on future population trends and growth.

19. Planning groups should develop procedures for research and ongoing self-evaluation as an integral part of the planning process.

The development of research and evaluation procedures will help planning groups guard against becoming unduly influenced by special-interest groups, whether they be professional, religious, civic, or proprietary. Also it will help keep planners from becoming rigid in the plans they have developed, especially those of a long-range nature. By the process of continual evaluation and research, the planning group will be constantly alerted to the overall community needs, and changes can be made in the planning process whenever justified.

Chapter III

The Planning Process

PLANNING FOR REHABILITATION facilities and services should be a part of total community and health facility planning. Several advantages will accrue. Rehabilitation services will be coordinated with related health and community programs, providing ready availability of all facilities needed to complete the rehabilitation

process for the disabled. Coordinated planning will permit better organization and development of the rehabilitation services required. In addition, rehabilitation facilities will gain increased recognition as important and necessary facets of total community health and welfare programs.

The Planning Organization

IN MANY INSTANCES, the planning for rehabilitation services and facilities can be made a responsibility of an existing metropolitan or other areawide planning agency as visualized in the report, "Areawide Planning for Hospitals and Related Health Facilities" (1). Under the principles established in this report, an areawide planning agency would (a) have a governing body composed of members drawn from top lay and professional community leadership, (b) be responsible for a specifically designated geographic area, and (c) have close working relationships with health facilities and related organizations within the area, the health professions, the community leadership, and groups and agencies which control and influence sources of financing. Frequently however, the rehabilitation facilities planned within the metropolitan area will serve a much larger geographical area than other types of facilities planned by the areawide planning agency. It may also be feasible for the planning groups in two or more contiguous geographical areas to jointly plan for needed facilities and services.

In some States, planning for rehabilita-

tion facilities may best be performed by a planning group organized on a statewide basis. Occasionally it may be necessary to establish an interstate planning group. In both these instances, appropriate official State agencies (Hill-Burton State agency and State Vocational Rehabilitation agency) should stimulate the development of a special rehabilitation committee, representative of major institutions, agencies, and organizations interested and involved in some phase of the rehabilitation process. This committee should be given the responsibility for advising and assisting in developing a comprehensive program for rehabilitation services and facilities within the State or interstate area.

In summary, where a well-organized areawide planning agency already exists, it should be encouraged to assign a high priority to the planning of rehabilitation services and facilities. In the absence of such a planning agency, action should be taken by State Hill-Burton and Vocational Rehabilitation agencies to develop an acceptable planning mechanism.

Planning Agency Functions

As noted in the areawide planning report, areawide planning agencies can help to:

- ◆ Correct deficiencies in existing facilities and services.
- ◆ Stimulate needed construction and discourage construction not conforming to areawide needs.
- ◆ Assure more effective use of areawide funds by avoiding unnecessary duplication of highly specialized, infrequently used expensive facilities.
- ◆ Improve care for the acutely ill, chronically ill, and disabled by developing effective interrelationships among facilities and services.
- ◆ Develop an orderly distribution of all facilities in keeping with projected population characteristics and the overall areawide development.
- ◆ Encourage individual facilities to define and carry out their objectives and projected roles in relation to other facilities, services, and areawide needs.

Advisory Committee and Professional Staff

An advisory technical committee for planning rehabilitation facilities should be established to assist the planning agency in considering all aspects of rehabilitation problems. Such a committee will give the planning agency the benefit of its specialized knowledge and perspective as to the rehabilitation needs of the area. This advisory technical subcommittee should include representatives of both voluntary and official agencies in the rehabilitation field. Because of the great variety of rehabilitation activities and organizational structure, committee members should have a broad understanding of the field as a whole as well as intimate knowledge of their specialties.

The planning agency should have an adequate professional staff to carry out the various activities of the planning process. The staff should include a director and professional personnel to provide needed statistical and technical skills. The professional personnel should have experience in socioeconomic planning and an understanding of the planning problems in

the areas of health and medical care. The staff should also be broadly conversant with the various phases of the rehabilitation process, but will not usually be specialists in the field of rehabilitation.

In addition to a professional staff and an advisory technical subcommittee, it may be desirable to use experienced consultants. Qualified consultants may be found among the personnel of recognized rehabilitation facilities and organizations and in Hill-Burton and Vocational Rehabilitation agencies.

The professional staff, advisory technical subcommittees, and consultants should work together in determining the types of information needed, identifying the sources of available data, and evaluating the quality of data. They should also cooperate in reviewing the various data in terms of their relationships to, and effects upon, planning for the development and implementation of the rehabilitation process. Finally, these groups should jointly develop recommendations for consideration by the planning group.

Interagency Relationships

Close collaboration should exist between State Hill-Burton and Vocational Rehabilitation agencies and the local areawide planning agency. This cooperation should cover both the development and implementation of plans. Every effort should be made to have all planning agencies within the same State use uniform guidelines in their planning procedures and techniques. Some joint membership on the Hill-Burton advisory council and on the local planning agencies or one of its advisory groups is desirable.

Where it is necessary to establish a special statewide or interstate planning committee for rehabilitation facilities, this committee should include representatives of State Hill-Burton and Vocational Rehabilitation agencies. If the official Hill-Burton agency is an organization other than the State Health Department, the Health Department should be represented on the rehabilitation planning committee.

State Hill-Burton agencies should officially recognize qualified areawide planning groups and should work closely with such groups to assure that areawide plans can be included in the State Hill-Burton plan. Moreover, to assure that rehabilitation services and facilities will be effectively integrated into the areawide

planning effort, the cooperation and assistance of State and Regional Hill-Burton and Vocational Rehabilitation personnel should be involved in the early stages of the areawide activity and maintained throughout the entire planning effort.

Basic Planning Procedures

Obtain Needed Data

THE COLLECTION, tabulation, and analysis of data are primary steps in planning for rehabilitation facilities and services. The data needed include information on: (1) population and community characteristics; (2) number and variety of disabling conditions; (3) availability and quality of existing rehabilitation services; and (4) health, medical care, and social welfare patterns and trends in the planning area. All data must be pertinent. The gathering of non-essential data should be avoided.

Collection of pertinent data is complicated by the lack of definitive criteria for measuring rehabilitation needs. Although considerable work is in progress on the subject, criteria are not well established. The same lack of criteria exists, to a degree, in relation to other rehabilitation data such as cost and standards of services. This means that much of the necessary information must be based upon empirical judgments of knowledgeable persons.

The initial action in securing needed information should be an examination of all existing studies and surveys of rehabilitation facilities and services in the planning area. Following this, a series of profiles should be developed to provide an inventory of existing conditions in the area and to permit estimates of current and potential demand for rehabilitation services. These profiles include the following:

- ◆ Existing facilities and services—numbers, type, size, sponsorship, structural and functional condition of facilities, relationship with other facilities and services.
- ◆ Current service load—numbers, type, length

of stay, rate of flow to and out of facility, methods and amount of payment.

- ◆ Available medical and other professional personnel—physicians, nurses, physical therapists, occupational therapists, vocational counselors, teachers, social workers, psychologists.

- ◆ Population—trends, age groups, concentration, socioeconomic and cultural characteristics, prevalence of disability.

- ◆ Topography—transportation routes, natural barriers, shopping centers, location of facilities and services.

- ◆ Socioeconomic conditions—income, industrial and commercial patterns, employment opportunities, availability of insurance.

If the review of existing information and the development of profiles do not provide the information necessary for establishing rehabilitation needs, evaluating existing facilities and services and identifying gaps in services, the planning groups should undertake a special study to secure the necessary information and data. This procedure should be adopted only after careful consideration and an intensive review of the time and costs involved in relation to the potential benefits.

Determine Needs

Review and analysis of the information obtained from existing surveys or studies as well as the development of profiles and any special studies which may be made by the planning group will provide a basis for making empirical estimates on the extent of rehabilitation needs

in the planning area. These estimates should cover both current and potential demand. The determination of current demand, both met and unmet, should be based upon population characteristics, the extent of disability, and the availability of support for rehabilitation services. Potential demand should reflect the effect of population changes, new techniques and services, and changes in methods of financing.

Knowledge of rehabilitation needs includes an understanding of the extent and depth of interest of the disabled in becoming involved in the rehabilitation process. Studies have shown that not all of the disabled who could benefit by participation in the rehabilitation process will actually utilize rehabilitation services, even though the services may be readily available to them.

Evaluate Existing Services and Facilities

The evaluation of existing services and facilities should cover: objectives and goals, types of programs available, administrative settings, patient referrals, current utilization, financing and staffing patterns, and suitability of physical plants. The evaluation should also cover qual-

ity of services as well as their limitations and restrictions.

Match Programs to Needs

Matching the extent of need for rehabilitation services with the services currently available in the planning area will reveal inadequacies in existing patterns and will identify the disability groups within the population inadequately served. Thus, planning groups will be provided with information upon which to make recommendations for upgrading and expanding existing services and facilities or for establishing new programs.

In matching programs to needs, planning groups should establish both short-range and long-range goals. Short-range goals should have strong potential of attainment within approximately 3 to 5 years. Long-range goals may cover periods of time up to 10 years. Planning groups should be mindful that long-range goals run the risk of becoming inaccurate through changes in population, shifts in the socioeconomic life of the planning area, and new health and medical care developments. Flexibility in adjusting goals to changing conditions is therefore vital.

Implementing Recommendations

THE EFFECTIVENESS of the planning process depends upon the validity of conclusions drawn and the success obtained in motivating definitive action toward the development of a coordinated system of community services and facilities. The interpretative and evaluative phase should be followed by positive decisions for implementation. Recommendations should be practical, realistic, and attainable. Each proposal should be weighed in terms of the resources of the planning area. Action planned to achieve short-range goals, especially, must be well within the current capabilities of the area. Success in accomplishing these short-range objectives will stimulate increased support for long-range goals requiring more sophistication and experience.

Determine Disability Groups To Be Served

Since the level of financial support which currently may be anticipated for rehabilitation services will probably not be sufficient to provide complete coverage for all rehabilitation needs, the prime task of the planning group should be to decide upon the disability groups to be served. In making this decision, planning groups should distinguish between the determination of rehabilitation needs and the establishment of realistic demands for rehabilitation services. The former should be the basis of overall planning on a long-range basis. The latter should serve as the foundation for short-range programming for expanding existing facilities or constructing new physical plants.

In establishing the short-range demand for rehabilitation services, the planning group should determine the component services required to make the rehabilitation process available to the handicapped and disabled who will utilize such services. This decision involves knowledge of the gains to be obtained by the disabled, their families, and the community. It also involves a realistic estimate of the availability of current and potential sponsorship. In determining the disability groups to be served, the planning agency will wish to consider types of disabilities which heretofore have not always been adequately cared for; e.g., mental disabilities, physical disabilities not associated with musculoskeletal and neurological conditions, or mental retardation.

Stimulate Preventive Programs

Planning groups should provide leadership in stimulating areawide interest and support of efforts to prevent disability. The development of programs for the prevention of disability should be correlated with the development of programs to provide the rehabilitation services essential in the planning area. Planning groups may wish to work with various local community groups and medical societies in developing educational programs to promote understanding and support of efforts to prevent handicapping conditions and to lessen the incidence and severity of disability.

Develop a Written Program

In developing a written program for meeting the realistic demand for rehabilitation services, the planning groups should decide whether existing facilities should be expanded and upgraded or new facilities established. Next, the planning group should seek an adequate sponsor to carry out its proposals. A decision to expand will depend in part upon the present and potential capacity of existing facilities to satisfactorily enlarge their programs and services. For many facilities, such expansion is already in the planning stage ready for implementation with proper financial support and leadership. Planning groups should determine whether

these plans contain or may be modified to contain the elements essential to meet the short-range realistic demands for rehabilitation services in the area.

The planning group should seek a sponsor having a knowledgeable Board, representing top leadership in the community, with some sophistication, experience, and interest in the rehabilitation of the disabled. The sponsor should also have existing or potential financial capacity to support the facilities and services proposed.

In developing either an expanded or new program, the planning groups should assist the sponsor in his efforts to accomplish the following:

Establish a Realistic Program Based on Sound Knowledge as to Needs and Demands.—The program should have specificity in terms of geographical area to be served, disabilities to be covered, and services to be offered. The objectives and goals of the program should be well understood and supported by the community including the medical profession.

Gain Full Support of Community Leaders and the Medical Profession of the Area.—Full community support is essential. Rehabilitation facilities should have the strongest Boards possible in order to develop effective solutions for their many problems. The planning group should encourage the development of strong facility Boards through the promotion of programs emphasizing the civic responsibilities of trusteeship. The appointment of individuals representative of the geographical area and its patterns of socioeconomic and cultural influence should be stimulated.

Planning groups should also assist sponsors in stimulating and sustaining the interest of the medical profession. Establishing professional support requires an extensive educational program carried out through local, regional, and State medical societies. Continued support may be furthered through the establishment of advisory medical committees. Planning groups should encourage physicians to take advantage of scholarships available in the rehabilitation field and to participate in various inservice training programs.

Secure Adequate and Sound Financial Support.—The development of programs to meet rehabilitation needs should be predicated on adequate and sound financial backing on a continuing basis. The wider the range of services to be made available, the broader the financial base required. Sponsors should recognize the primary need of providing an adequate financial base through active efforts to secure complete and continued support. Third-party support will be contingent upon a full understanding of program objectives and goals. High level support by the medical profession and the community will enhance the potentials for improved third-party support through the creation of a favorable climate of public opinion.

Where capital financing is required, planning groups should be able to advise sponsors of capital fund-raising potentials. Sponsors should also be advised as to current major sources of capital funds.

Determine Availability of Qualified and Experienced Personnel.—The availability, in adequate numbers, of qualified and experienced professional personnel to staff expanded or new programs should be determined. Decisions by the planning group regarding the programing of additional facilities and services should be based, in part, upon an evaluation of the quantitative adequacy of qualified and experienced personnel to meet current and potential staffing requirements.

The presence of qualified personnel in the community does not automatically mean that they are engaged in or available for rehabilitation services. The planning group may have

to undertake a campaign of persuasion to encourage them to enter or return to the rehabilitation field.

Where feasible and practical, sponsors should be encouraged to promote the establishment of training programs for rehabilitation personnel in a university setting as described on page 10 of this report. Such promotion will necessitate a broad-range educational program to acquaint the public with the need for and value of rehabilitation services. Planning groups should also give active support to all educational recruitment efforts for the various disciplines involved in the rehabilitation process.

Develop a Physical Plant to Meet Present and Anticipated Needs.—Sponsors should be encouraged to develop physical plants which will provide for efficient and economic housing of needed services. The over-development and over-planning of the physical plant should be discouraged. In planning facilities, sponsors should be urged to give prime consideration to: (1) the disabilities to be served; (2) the component rehabilitation services required; and (3) the number of disabled persons expected to utilize the facility. (See Appendix V for plans and elements of rehabilitation centers.) All plans should be designed to provide flexibility to meet future needs. Sponsors should be advised to utilize the services of qualified and experienced consultants and architects in the planning of individual facilities. Planning groups should also advise sponsors as to availability and location of recognized consultants and architects.

Developing Self-Evaluation and Research Procedures

THE PLANNING GROUP should develop evaluation and research procedures designed to keep its programing abreast of new demands and changing conditions. The evaluation procedures should cover the activities of the planning agency to maintain its efforts at a high level of efficiency. They should be designed to evaluate the activities of existing facilities in their efforts

to meet the demands of new developments and needs in the field of rehabilitation. Planning agencies will find it profitable to engage in research in such areas as: (a) determination of prevalence of disability; (b) measurement of need for rehabilitation facilities and services; (c) patterns of utilization of rehabilitation facilities, and (d) financial support of facilities.

Chapter IV

Profiles: Current Patterns and Problems

A WIDE VARIETY of patterns is found in almost every phase of organizational structure and service activity in the rehabilitation field. Some of this variation is inherent in the rehabilitation process itself, which places the accent on meeting the needs of individuals. Community pressures to meet particular needs account for additional diversity in services and facilities.

Yet, when the varied ranges in program emphases, administrative settings, staffing, financial support, and professional and community backing are examined, certain common elements can be identified. Fundamental problems which require realistic and effective planning for solution can also be pinpointed.

Program Emphasis

Medically Oriented Facilities

THE PROGRAMS of medically oriented rehabilitation facilities place heavy emphasis on physical restoration. Their major goal is to bring the handicapped person to the highest point of physical potential in relation to the specific disability involved. This potential is developed in the frame of reference of the total needs of the individual: medical, psychological, social, and vocational. Nursing services, physical therapy, occupational therapy, and speech therapy, as well as social and psychological services, are developed and maintained in terms of medical management of the patient. Vocational services are usually limited to prevocational evaluation. Many facilities give considerable attention to training for independent living. This involves not only analysis of the training needs for activities of daily living but also an evaluation of the home environment. From this evaluation come recommendations for changes in existing features within the home and for the purchase of essential equipment.

Vocationally Oriented Facilities

Vocationally oriented facilities concentrate services on patients who are "further along the rehabilitation road" or not so severely involved physically. The primary focus of these facilities is on vocational services with well-developed psychosocial services. The vocational services include evaluation, counseling, prevocational exploration, development of work tolerance, vocational training, transitional workshop employment, job placement and follow-up. Full use is made of the techniques of job sample testing, supplemented by aptitude and interest tests. Heavy emphasis is placed upon needed vocational training and job placement.

In job placement, the disabled are evaluated in terms of both the vocational requirements and the social and emotional factors involved. Stress is placed on matching the handicapped individual with the total factors of the job environment. Most of the clients are ambulatory. Many are on crutches or in wheelchairs. Living-in accommodations, where available, are

usually domiciliary. Some provide a minimal amount of nursing care. Medical services provided in vocationally oriented facilities are geared to the development of fitness for job placement.

Psychosocially Oriented Facilities

The past decade has seen the development of a new type of rehabilitation facility: psychosocially oriented facilities. These facilities concentrate attention on the individuals with long-term or permanently disabling conditions of mental character. Their prime goal is re-entry of the individual into community and family life. To accomplish this goal, great emphasis is placed upon psychosocial and voca-

tional evaluations. Vocational training and re-training are made available for those requiring a new type of employment.

A distinctive feature of psychosocial rehabilitation facilities is their use of community resources to bring the mentally disabled individual to fullest potential. Their success depends in large measure on the willingness of community organizations and agencies to provide needed services. Every effort is made to provide a normal type of noninstitutional atmosphere. Location of the facility is selected and developed on this premise. Individuals participating in the program are given as much personal attention as desired. However, no effort is made to force their participation in the various services available.

Administrative Setting

REHABILITATION FACILITIES are found in a wide variety of administrative settings. Some exist as organized departments in general and mental hospitals. Others are operated as independent comprehensive centers, as rehabilitation workshops, as comprehensive facilities sponsored by State Vocational Rehabilitation agencies, and as single disability centers for the mentally handicapped, for the blind, or for those with speech and hearing disorders. Administrative settings exert a great influence on the program emphasis of the facility, the type of clientele served and the financial support available. They also affect the nature and scope of professional activity within the facilities.

In Educational Institutions

Educational institutions which provide rehabilitation facilities are medically oriented. Admission preference is given to those presenting good teaching and training potential. The medical director of the facility is generally responsible to the medical school as well as to the hospital. The hospital provides administrative and maintenance services. The medical

school facility has many advantages in its dynamic and progressive environment, in the availability of medical consultants, and in its training of professional personnel. However, the narrower selection of patients and emphasis upon activities associated with the medical school frequently place limits on effectiveness in meeting community needs.

Through their various affiliations, these facilities contribute extensively to the training and orientation of physicians, physical therapists, occupational therapists, nurses, vocational counselors, psychologists, social workers, orthopedic technicians, and others. Their research activities extend over the entire range of disabilities and their management. Most of this research is financed through government grants and private foundations.

In General and Mental Hospitals

Rehabilitation facilities in hospitals are usually operated as separate administrative units. Under this arrangement they receive most of their operating and maintenance services from the hospital. Admission policies are

controlled by the hospital. They are medically oriented in terms of program emphasis. Direction and supervision of facilities rests with one of the following: a full-time medical director; a rehabilitation council or board composed of staff physicians; or the medical director of the hospital (4). Referrals are received from staff physicians for many types of disabilities usually involving physically handicapping conditions. Inpatient services are generally provided in a separate ward. However, rehabilitation services are usually available for all patients in the hospital.

There is an increasing tendency on the part of mental hospitals to create rehabilitation units. Organization of these units is somewhat like that found in general hospitals except that greater emphasis is usually placed on vocational and psychosocial services. Frequently these units are set apart physically from the main hospital and have an administrative identity of their own. Their programs are designed to facilitate the return of the patient to his community.

In Independent Facilities

For Inpatients and Outpatients—Independent rehabilitation facilities serve the community and are sponsored and supported by private voluntary organizations and incorporated as nonprofit institutions. They usually provide a full complement of the component services of the rehabilitation process. Although independent in organizational structure, some have developed formal relationships with general hospitals. These facilities provide services to vocational rehabilitation agencies, State agencies for crippled children, welfare agencies, workmen's compensation commissions, and other public and voluntary health and welfare agencies. Most of them provide for bearing some of the costs of the indigent handicapped. As independent centers, they have flexibility to meet new needs promptly. Many of the present centers were previously "treatment centers" providing a single rehabilitation service. They have now expanded into facilities providing comprehensive services.

For Outpatients Only—Facilities which only serve outpatients usually exhibit the same characteristics as independent rehabilitation organizations serving both inpatients and outpatients. Generally, outpatient facilities have less medical direction and supervision than inpatient facilities. Outpatient facilities frequently emphasize the vocational phases of the rehabilitation process, extending from prevocational counseling through training in a workshop environment to job placement. In these instances, the workshop function is often the major phase of the program.

For Single Disabilities—Single disability rehabilitation facilities serve one type of disabling condition such as the blind, the deaf, or the mentally handicapped. They usually provide a full gamut of services geared to meeting the needs of the type of disability involved. Coordination of treatment through the team approach is stressed. In single disability centers for the blind, adjustment problems rather than medical problems receive prime attention.

State Rehabilitation Agency Facilities

Although most State Vocational Rehabilitation agencies follow the traditional practice of buying services for their clients from facilities administered by others, the number of State agencies that now operate one or more rehabilitation facilities is increasing. Five State agencies have established multiple disability rehabilitation centers, which provide a full range of comprehensive rehabilitation services with emphasis upon the vocational and prevocational components of the rehabilitation process. Two other States have such centers under construction. More have expressed interest and are conducting preliminary studies. In justification for expenditures of their own centers, two reasons are most often advanced by State Directors of Vocational Rehabilitation: (a) that the program can be tailor-made to agency needs; and (b) that a center becomes a show window when the rehabilitation process is translated from an abstraction into something easily understood and quickly explained.

Financial Operations

REHABILITATION FACILITIES face many problems in maintaining sound financial status. Their position in the competition for the health dollar is not an enviable one. This difficult financial situation is the result of the interplay of many factors. Some factors find their origin in the nature and scope of the rehabilitation process. Others stem from the persistent use of outmoded financial policies. Still others come from the incomplete understanding by the medical profession and community leaders of the function of rehabilitation in treating the chronically disabled. Meeting rehabilitation needs is frequently regarded as optional by the community, the medical profession, and even the disabled themselves. The high priority of facilities and services for the acutely ill often depletes all types of financial resources before the needed rehabilitation process is initiated.

Economic strength is vital to the sound development and growth of rehabilitation facilities. In their efforts to maintain this essential economic strength, facilities face a continuing and critical problem of mobilizing the necessary financial operations. The development of these standards has encountered many difficulties stemming from wide variations of facilities as to size, program emphasis, staffing, equipment, methods of basing service charges, local conditions, and sponsorships. Until recently there has been little information on cost accounting procedures for rehabilitation facilities. Based on extensive research, Mott has now prepared basic accounting procedures, cost accounting, budgeting and statistical procedures for rehabilitation facilities (5, 6).

Cost of Rehabilitation Services

Rehabilitation is expensive. The rehabilitation process involves trained personnel and costly equipment. Moreover, the services provided are both extensive and intensive for a continued and lengthy period of time. The intensive phase often begins when the financial resources of patients, including third-party sup-

port, are tending toward complete depletion. Expenditures for personal services are the major elements in the operating costs of rehabilitation facilities. Coupled with fringe benefits they account for approximately three-fourths of the total operating expenditures (7). Rehabilitation costs vary widely from facility to facility because of different types and intensity of care.*

Three major trends in the patterns of costs of rehabilitation can be discerned. In facilities which are a part of, or affiliated with, a general hospital, the per diem costs for rehabilitation patients are closely related to the overall per diem patient costs. Costs in independent facilities, both serving inpatients and outpatients, vary with the type of handicapping conditions served and with program emphasis. Disabilities requiring the utilization of a high ratio of both professional and nonprofessional personnel per patient result in higher costs. On the average, the current per patient day costs approach \$50.00 in inpatient medically oriented facilities concerned mainly with the severely physically disabled.

Costs in outpatient facilities are difficult to analyze. The costing of services in this type of facility has not been widely adopted. Costs per visit in outpatient facilities are also affected by many socioeconomic factors such as the amount of time the facility is open for service, the range of rehabilitation services offered, and the types of personnel available.

Frequently, there is a lack of public understanding of the cost of rehabilitation services. The impact of the cost is increased by the sequence in which rehabilitation occurs. These services are usually needed and utilized following severe depletion of private resources and third-party support needed in the acute stage

* Excluding the costs of medicine, nursing, admissions, and workshop departments, Mott found that per patient visit costs ranged from \$3.66 to \$11.33. The median cost for all centers was \$7.78. The average cost per patient day in the inpatient centers in the Mott study ranged from \$11.60 to \$30.06. The median was \$21.88.

of disability. The lack of financial resources tends to create a feeling that the cost of needed services is excessively high. In addition, there is a common belief that rehabilitation services should be comparatively inexpensive since the physical plant and equipment do not generally have the costly appearance of hospitals.

Sources of Financial Support

Major sources of operating income of rehabilitation services are fees for services to patients (income earned from charges) and subsidies (contributions, grants, securities, and investments). Fees rank first for inpatient facilities, and subsidies are the primary source of operating funds for outpatient facilities. Mott found that fees for services to patients provided about 75 percent of the operating income in inpatient facilities. In outpatient facilities 63 percent came from subsidies (8).

Most of the income from fees came from third-party payers. The proportion is higher in inpatient facilities than among those providing outpatient services only. In the Mott study the ratio was 85 percent for inpatient facilities and 65 percent for outpatient facilities. Major sources of third-party support are State Vocational Rehabilitation agencies, insurance companies and self-insurers, health and welfare plans, voluntary health agencies, and foundations. Rehabilitation facilities are usually confronted with the fact that programs of third-party payers either concentrate on physical restoration or vocational evaluation and training. Thus, the support of one organization may provide assistance to facilities that have a medical orientation, while that of another gives major aid to those that are vocationally oriented.

Sources of third-party support vary from area to area, from facility to facility, and from one time to another. In general, the greatest stabilization of third-party support is to be found in rehabilitation facilities providing physical restoration services for inpatients in a general hospital setting. These facilities provide measures of usage and a unit of cost of service which are often not available to facili-

ties for outpatients emphasizing services other than physical restoration.

Third-party support is often uneven. Because of the many problems facing third-party payers of rehabilitation services (e.g., their budget and program requirements) the amounts available for the purchase of care from a given facility may vary from time to time. This, in turn, creates serious problems in the financial operations of the facility thus affected. Not infrequently the giving or withholding of third-party support is based upon personal decisions rather than stated policy.

The long-term aspect of the rehabilitation process frequently necessitates having more than one sponsor for a patient. It is not uncommon for a severely disabled person to have three or more sponsors. This need for multiple sponsorship of patients places a burden on the facility. Many third-party payers seek to serve as many individuals as possible. This means partial support. They also place time limits on the availability of assistance. These procedures force facilities to seek additional sponsors or incur deficits.

Rehabilitation facilities rely on subsidies to compensate for deficits occurring from fees for services rendered. In many facilities these subsidies provide from one-fourth to more than one-half of the operating income. These subsidies take the form of direct grants from parent organizations and agencies operating the facilities, from governmental agencies, from united funds and community chests, from research grants, from national and local health and welfare groups, and from philanthropic foundations and individuals.

The dependence upon subsidies to cover operating deficits presents real problems. Many of these subsidies are available for a limited time period. The grantor usually retains an option to review his commitment from year to year. Availability of subsidies is contingent upon approval of budget requests by the agency or agencies providing financial support. Earmarking of funds for specific disabilities tends to bend the program to meet the rehabilitation programs of the subsidizing organizations with little regard to the total picture.

Trends in Costs

Rehabilitation costs are rising. This rise has been comparable to the general upward trend for all types of health and medical care. Costs have increased as the demands of the medical profession and public for high quality services increase, producing a corresponding need for more professional personnel. Techniques and procedures in the rehabilitation process are becoming more sophisticated, demanding more expensive equipment and personnel. These techniques plus a greater depth of services contribute to higher costs. In addition, salary levels for personnel have had to be stepped up to keep pace with constantly rising living costs and the increased pressure of competition for personnel.

On the brighter side, the growth of scientific and medical information plus the development of better treatment techniques have combined to reduce the length of time needed to successfully complete the individualized rehabilitation programs of the disabled. This reduction of time per person needed for the rehabilitation process has tended to keep the total cost of rehabilitation at a generally stabilized level despite the rise in costs of services.

Stabilizing Support

Practically all rehabilitation facilities face serious problems in establishing a stabilized base for continued support. The economic plight of many rehabilitation facilities is the result of effects of a "roller coaster" type of support by many public and voluntary third-party payers of rehabilitation services. The dependence of rehabilitation facilities for third-party and subsidy support is influenced by the budgetary policies and program emphases of the supporting agencies. Any shift in these policies or programs can wreak havoc on the "depending" facility.

The role of rehabilitation must be recognized when financing for the total medical and health care needs of the community is planned. Without this recognition, the long-range solution of the financial problems of rehabilitation facilities will continue to be difficult. (As the

role of rehabilitation in the care of the disabled increases, the importance of stabilizing financial support becomes more apparent. A significant trend is to be noted. Rehabilitation facilities are giving more attention to their fiscal operations by careful and efficient staging of their operations and by adopting procedures for cost accounting of services. It is becoming more clearly recognized that effective rehabilitation services are those which have continuous solid long-range support.

Problem of Financial Support

Financial resources for sponsoring the rehabilitation process are fragmented along lines of the components of the rehabilitation process itself. Their depth and breadth are highly variable. Multiple and incomplete sponsorship of each individual is common outside of workmen's compensation and government-sponsored programs. Program and service costs are inadequately related to charges because of technical accounting limitations, variance in definitions, and policy affecting payments. Charge structures are loosely related to costs. Partial institutional support, based on variable subsidies, which has become common, results in financial instability and ultimately affects operational patterns.

Extensive variation is found in true cost as related to the extent of disability and comparable need for services. Also, cost of services may differ depending on their timing and use, aside from real cost differences, depending upon program emphasis. Moreover, the exercise of freedom of choice by the disabled as to the time to seek rehabilitation services, coupled with the failure to recognize the interdependency of needed services separately sponsored, make care of the disabled a fragmented and unbalanced process.

Overall, there is a growing recognition that the major economic impact of disabling conditions is the frequency and rapidity with which personal and local financial resources are soon exhausted. There is increasing awareness also that the delay in the use of rehabilitation services results in a higher cost than a restorative,

anticipatory, or preventive service would involve. Indigency resulting from disability and the neglect of its management may affect any person regardless of predisability economic stability.

The extent to which the community can and will sponsor rehabilitation services is a moot question. Inherently regional in character, rehabilitation services customarily provide for disabled persons residing beyond the confines of the community in which the facility is located. There is a growing tendency for facilities to encourage and depend upon supplementary and complimentary fiscal sponsorship to meet total costs from all levels: the community, the county, the State, the Federal government, and national voluntary agencies. Since residence and available sponsorship do not necessarily coincide in every situation of disability, it is likely that only a regional awareness and regional financing arrangement on a concurrent basis will be able to resolve this problem of equating fees for services with support received from all sources.

Capital Funds

Availability of capital outlay funds is affected by many factors: knowledge of the need for the facility, acceptance of the programs and services by the medical profession and com-

munity, availability of economic resources, promotion of building programs, timing of campaign. In general, facilities derive their capital funds from four main sources: communitywide building fund campaigns, large donors, foundations, and government grants-in-aid (9). The construction of most new physical plants has involved grants under the rehabilitation category of the Hill-Burton program. These grants have been matched by local funds.

Facilities utilizing communitywide campaigns to raise building funds have found this method to have unique advantages in contributing to better community understanding and ultimately increased utilization in addition to securing money. The communitywide scope of such a campaign provides a medium for professional and lay orientation regarding the purposes and potentials of rehabilitation and the programs of the facility involved. In addition, this method of securing capital funds provides a wide base for solicitation.

Rehabilitation facilities actively solicit gifts from large private donors, trusts, and foundations in their capital drives. However, lack of understanding of the role and importance of rehabilitation in meeting the needs of the disabled, as well as incomplete knowledge of the services and programs of the specific facility involved, have tended to curtail the size of gifts from these sources.

Personnel Patterns

THE SHORTAGE of professional personnel for rehabilitation facilities is critical, particularly in certain categories vital to the rehabilitation process. The ratio of budgeted unfilled positions to total positions ranges from 1 to 6 for physical therapists, occupational therapists, and psychologists to 1 to 13 for vocational counselors. Social workers and vocational evaluators are also in short supply, with a ratio of 1 to 7 (10). (See Table 10, page 62.) This condition has existed for some time and appears to be a continuing one for the foreseeable future.

Although a large number of training programs in universities throughout the country

are financed by grants from the Vocational Rehabilitation Administration, a major problem is recruitment of young people interested in training for the various professions involved in rehabilitation. In addition, many rehabilitation facilities fail to recognize that their own personnel and salary policies, inadequate medical direction, and passive community support tend to produce vacancies or create rapid turnover. A realistic personnel policy is a strong factor in obtaining and keeping staff. It engenders a sense of security and creates an environment conducive to good morale which ultimately reflects on quality of service.

Professional Staff

Generally speaking, the professional staff represents about one-half of the total personnel of rehabilitation facilities. Rehabilitation facilities utilize physicians drawn mostly from the specialties of physical medicine, orthopedics, and internal medicine (11). Others are medically directed by a general practitioner, a neurologist, or a psychiatrist. Occasionally, pediatricians provide the medical direction, particularly if the facility emphasizes the care and treatment of children.

Inpatient facilities have a smaller proportion of professional personnel than those serving outpatients only. Inpatient facilities also have greater permissiveness in making use of aides and orderlies. The medical areas of rehabilitation programs have larger numbers of professional personnel than other areas. In the latter, there is greater need for continued personal assistance for the disabled. Physical therapists account for the largest number of professional employees in rehabilitation facilities; occupational therapists rank second. Inpatient facilities make extensive use of practical nurses, although available quantitative data indicate that more than one-half of the total number of nurses employed are registered. Outpatient facilities rarely employ nurses.

In many facilities, the staffing patterns of the nonmedical services—psychosocial and vocational—reflect their lesser emphasis and utilization in the total program. Psychosocial staff members usually account for the smallest proportion of professional personnel in rehabilitation facilities. Facilities with prime emphasis on vocational services have a higher proportion of vocational personnel. However, in most facilities the ratio of vocational staff to the total professional staff is not large. The number of administrative personnel is relatively stable, depending upon size of facility rather than program emphasis.

Most rehabilitation facilities depend on full-time professional employees. Mott found that almost 80 percent of the employees were full time, accounting for 90 percent of the hours worked (12). Greatest use of part-time professional staff occurs with physicians. The utiliza-

tion of part-time physicians permits drawing from a wide field of specialties. Frequently these services cannot be provided to rehabilitation facilities without accompanying private practice.

Professional qualifications are well-defined for rehabilitation personnel in the medical areas of rehabilitation. Physicians must be licensed and in many facilities hold membership or qualify for membership in a Board specialty. Graduate nurses must be registered. In most rehabilitation facilities only registered occupational therapists and registered physical therapists are employed. In these job classifications this pattern is informally dictated by the standards and practices of the national organizations involved.

Salaries

Salaries paid to the professional staff in many rehabilitation facilities are lower than in many other occupations in the same geographical area. This accounts for much of the shortage of professional personnel in the rehabilitation field. The upgrading of salaries in the past 5 years has not kept pace with the increments received by other professional groups.

Training

The personnel shortages being experienced by rehabilitation facilities present a serious obstacle to implementing new programs or expanding existing services. An important factor in these personnel shortages is the current status of training programs and training facilities. Although medical schools include rehabilitation in their curriculums, the amount of teaching and clinical time allotted is severely limited. In some schools, class instruction totals only 10–15 hours during the 4 years. Clinical teaching is limited to a few weeks in a rotation of services. In recent years, numerous postgraduate and refresher courses have been offered to general practitioners to increase their knowledge of modern rehabilitation techniques.

Schools for other professional personnel are not well distributed geographically. In some instances, they are in an environment not

conducive to the development of understanding or experience in the concept of the team approach in the care and treatment of the disabled or handicapped. Many professional schools have not been consistently able to obtain a full complement of students. Among many causative factors, inadequate recruitment practices rank high. Interest of potential students in enrolling for training in rehabilitation work is apparently significantly influenced by community understanding of the value and meaning of rehabilitation. It is also closely related to the opportunity for direct experience with rehabilitation.

The critical personnel shortage in all areas of rehabilitation has led to increased financial assistance to teaching institutions to strengthen instructional resources in programs related to rehabilitation, as well as grants to individual students and trainees. This assistance has been focused mainly on the fields of physical and

occupational therapies, medical social work, and medicine.

Among Government agencies, the Vocational Rehabilitation Administration and the Public Health Service engage in extensive efforts in educational assistance programs. A number of grants are available from these agencies. The Vocational Rehabilitation Administration makes grants currently to approximately 175 private and public universities and colleges throughout the country in a wide variety of fields directly related to vocational rehabilitation, including medicine, social work, physical therapy, occupational therapy, rehabilitation counseling, nursing, prosthetics and orthotics, psychology, speech pathology and audiology, rehabilitation of the deaf, and a large number of short-term training institutes. The Public Health Service also awards teaching grants to accredited educational institutions for the expansion of teaching programs.

Utilization

THE PATTERNS OF UTILIZATION of rehabilitation facilities show great fluctuations. Only a few facilities approach the maximum utilization of their existing physical plants. Others worry about a minimum professional staff with time on its hands. Within the same facility there is frequently uneven use among the different services being offered.

In many instances, underutilization of rehabilitation facilities and services stems from the lack of criteria to accurately forecast potential caseload. Often, facilities and services are planned without due regard to the importance of determining a realistic estimate of the number of persons who will use them.

The use of rehabilitation facilities is strongly influenced by their location as well as by accessibility to the population served and to the members of the medical profession on whom the facilities must depend for a large portion of referrals. Mott's study showed that approximately 70 percent of those served by the centers studied lived within 15 miles of the facility (13).

The demographic and socioeconomic characteristics of the community or area exert considerable influence on the use of rehabilitation facilities. In densely settled and highly industrialized areas, facilities have a high rate of usage and a significant demand for vocational services from a large percentage of their patients. Prepayment plans and other types of insurance coverage are to be found more extensively, creating a greater demand and support for physical restoration. In these areas, too, many handicapping conditions come within the purview of the programs of vocational rehabilitation agencies.

The broad-based support of rehabilitation services involving physical restoration in medically oriented facilities is conducive to a higher utilization rate than that of services available within facilities that are vocationally oriented. The former are needed more frequently by the disabled and more often covered by third-party payers. They are better understood by the medical profession, thus ensuring a higher rate of referrals. Vocationally oriented facilities

enjoy greater utilization by vocational rehabilitation agencies. However, the high cost of services as related to the frugal status of most vocational rehabilitation budgets confines utilization to only the more promising cases. Vocationally oriented centers are often planned on the basis of potential demands of vocational rehabilitation rather than the actual referral experience.

The utilization of the social, psychological, and vocational services depends upon the importance attached to these services in the total program by the facility and implemented through its operating policies. Underutilization of these services in many facilities comes from their existence "on paper" rather than in reality and from the minimization of needs by those administering the total program.

Rehabilitation facilities with full-time medical direction usually experience a fairly high rate of utilization. A full-time medical director is effective in interpreting the program of the facility to the medical profession. This engenders a better understanding of the role of the facility in treating the long-term patient and stimulates closer working relationships between the facility and physicians. From this comes an increase in patient referrals.

Basic to all utilization problems is the extent of communication and liaison between the rehabilitation facility and the community. Good communications not only produce a better understanding of the program of the facility, and hence better support, but also provide for active case finding and increased utilization of available services. Public opinion exerts a strong influence on the development and utilization of rehabilitation services and their effectiveness in meeting community needs. Many facilities have reaped tangible benefits toward optimal utilization through presentation of goals in a practical and realistic light, after carefully defining the range and extent of their

programs. This growth of understanding involves more than mere communication. It includes planning with representatives of the community as to ways and means of solving the myriad of problems confronting the facility and its program. It also involves sharing with the community the rewards for progress and achievement.

The primary purpose of a rehabilitation facility is to meet community needs. These needs for rehabilitation services are directly related to community patterns of health and medical care. Changes in these patterns have brought constant pressures for changes in rehabilitation programs, services, and clientele. For example, the decreasing incidence of tuberculosis and poliomyelitis and the increasing interest in mental retardation and psychiatric cases have produced the needs for many adjustments in rehabilitation programs and services. Consequently, many facilities have been planned with a capacity to expand and adjust to meet changes in community needs. These facilities experience a comparatively high rate of utilization.

Other facilities, however, have found both their plants and programs limited. As a result, their effectiveness and usefulness are much below that desired by either themselves or the communities they serve. Advances in the broad field of medicine, the expansion and development of other community health programs, and the influence of these trends on the needs for rehabilitation services require that the programing of rehabilitation facilities be considered on the basis of coordinated components and within the patterns of total community health needs. Lack of cooperative working relationships among the many organizations concerned with the development and utilization of rehabilitation facilities and services contributes to underutilization.

Professional and Public Support

THE DEVELOPMENT and continuation of professional and public support depend upon an understanding and appreciation of the personal

and socioeconomic values of rehabilitation by the medical profession and the general public. In promoting favorable attitudes, rehabilita-

tion facilities have discovered the value of intensive involvement of the medical profession and the public in the broad facets of the rehabilitation process. Constructive attitudes have come from the acceptance of the need for rehabilitation and the assumption of the responsibility of participation in fulfilling this need.

Professional Support

Physicians play important roles in the rehabilitation process. They directly influence the utilization and effectiveness of facilities and services. Physicians are, for most rehabilitation facilities, the main source of patient referral (14). Recent figures on sources of patient referral indicate that 42 of the 66 nursing bed centers reporting listed the private physician as the prime source of referral. He was also ranked first by 34 of 48 outpatient centers reporting such data (10). Thus, physicians are generally the guiding force in the rehabilitation program of the patient. Since a large part of rehabilitation falls in the medical area, it is under direct supervision of the physician (11).

Rehabilitation facilities are frequently confronted with situations which are deterrents to effective physician support and understanding. In many areas, a majority of physicians have not had sufficient experience in rehabilitation to enable them to make full use of available services. They do not fully understand and accept the role of rehabilitation. Often they are indifferent or apathetic. The involvement of new techniques and disciplines of rehabilitation not closely associated with "old line" medical practice are not adequately understood. Rehabilitation facilities find that there is an entrenched feeling of skepticism toward new treatment patterns that are somewhat unfamiliar. In addition, the financing of physician services often presents a real problem. Many programs for supporting rehabilitation do not provide for payment of required medical care. Many physicians have a genuine fear of loss of patients from their medical supervision or practice through the use of rehabilitation

services. This strongly inhibits their utilization of rehabilitation and represents a realistic issue with which these facilities must deal.

Rehabilitation facilities have found solutions to these problems in the active participation of the referring physicians in the development of rehabilitation programs. This involvement results in a clearer understanding and recognition that rehabilitation assists rather than preempts the interests of physicians and that it welcomes and supports the preservation of the initial patient-doctor relationship. The importance of medical participation in rehabilitation is stressed by the report of the Committee on Rehabilitation of the American Medical Association. The report emphasizes that the physician's understanding and leadership is essential if his patients are to receive all of the benefits total rehabilitation has to offer (15).

Often rehabilitation facilities find that physicians are not adequately aware of their own role in rehabilitation. This can be successfully remedied through establishing educational programs and methods for periodically reporting patient progress to the referring physician. Active participation of the referring physician in patient evaluations is an effective mechanism toward developing better physician understanding and support. Rehabilitation facilities also utilize their medical staffs to create favorable attitudes among their professional colleagues and referring medical agencies. The degree of potential support which the medical staffs can develop has great significance in the fulfillment of the rehabilitation needs within their service areas.

Rehabilitation facilities enhance the effectiveness of physicians by having them serve as members of Boards or as members of advisory medical committees. In these capacities, physicians participate in the administration of the facilities involved and are in a position to place planning and program operations on a sound and realistic medical base. As Board or advisory committee members, physicians serve as prime interpreters to the community of the scope and objectives of rehabilitation facilities and the services available within them. Such

interpretations usually become the foundations of public support.

Public Support

Public support of rehabilitation is as basic and necessary as physician support. At the heart of public support is an understanding of the importance of the role of rehabilitation. Many rehabilitation facilities have increased community support by making the public a real partner in the planning of programs and services. Through conveying the interest of the facility to the area and by encouraging the participation of various physicians and lay leaders in achieving the objectives of the program, facilities have developed a medium for mutual understanding and support. Rehabilitation facilities almost without exception find that volunteers perform valuable services in developing and maintaining community support as well as in terms of patient welfare and morale. Based on sound policies, the utilization of volunteers contributes to effective public relations, strengthening and stabilizing public support of rehabilitation facilities and services.

The attainment of adequate public support for many rehabilitation facilities is impeded by

special interests concerning specific disabilities. For these special interests, a shift in the program content of facilities or the establishment of new facilities is often construed as a threat to existing facilities and programs, to be resisted with every possible effort. The task of developing proper public support under these conditions is complicated by the fear of competition, fear of deviation from traditional functional areas, and preoccupation with specific emotional interests. In many areas, existing programs continue to function in line with precedents and traditional policies even in the face of loss of adequate community support.

Some place in the planning, development, and operation of all rehabilitation centers one or more strong personalities will be found: an administrator, a physician on the medical staff, a member of the Board, a donor. These strong personalities become the focus of the programs of rehabilitation facilities. On them, in many instances, the very life and service of the organization depend. In most instances, their influence is beneficial; in a few, their power has served to narrow the potentials of the organization. Not infrequently the influence exerted is indirect, sometimes stemming from their roles in related organizations.

Some Observations on Planning Problems

REHABILITATION FACILITIES and services have grown considerably since World War II. More facilities exist, the number of persons served has increased, a wider range of disabilities is covered, the financial backing of facilities is slowly improving, and professional and community support is becoming stronger. The pace, however, is too slow to meet the demand of the multitude of persons who could use and benefit from the rehabilitation process. Efforts are needed to accelerate and intensify acceptance and support.

The subtle urgency of rehabilitation is not as keenly felt as the obvious urgency of acute care. The support of the medical profession often has been a tenuous endorsement of an idea which has not been readily translated into pa-

tient referrals. In many instances, third-party payers whose clients need rehabilitation services do not have policies or procedures permitting the authorization of payment for such services. Many facilities providing essential rehabilitation services for multiple disabilities are underutilized through lack of referrals despite observable existent needs. While rehabilitation for a handicapped individual may be indicated and perhaps be a critical factor in terms of his return to productiveness, the fact that it does not constitute the difference between life and death makes it seem an optional rather than an imperative measure. This situation frequently makes it difficult to elicit adequate public support for rehabilitation.

Rehabilitation facilities experience diffi-

culty in competing with medical and other health care programs for community support. They must recruit sponsors of services for disabled persons who, in many instances, do not require acute care in a hospital. Sensitive to the increase in medical costs resulting from generally rising costs in health and social welfare, the public is sometimes hesitant about supporting additional programs and services which will add to these high costs. Rehabilitation facilities must tackle the difficult task of convincing the public that rehabilitation of a disabled person frequently more than pays for itself and that, in the long run and in a broad sense, adequate and effective rehabilitation facilities and services tend to lighten the public burdens of health care.

In addition to finding or developing increased financial support, more trained and experienced personnel, and greater professional and community support, rehabilitation personnel as a collective group must take stock of themselves. They must fully believe in the rehabilitation process and work to develop ways and means of ensuring that disabled persons have the comprehensive integrated services needed and from which they can benefit.

Inadequately coordinated and overlapping services result in ineffective professional and community support which eventually becomes translated into low quality of service. Where a lack of coordination exists, rehabilitation facilities face a serious problem in making accessible the component services of the rehabilitation process to the extent needed at the time needed.

Depending on age, disability, occupation, and rehabilitation potential a disabled person may be the subject of casefinding by many or none of the community agencies offering rehabilitation services. Referrals under such a system and the breaks and long interludes in

the rehabilitation process as the handicapped individual goes from one agency to another, result in personal and family discouragement and ultimately in attenuation of rehabilitation results. This, in turn, can produce professional and public skepticism toward the entire rehabilitation process. Overcoming this skepticism adds another hurdle for those attempting to gain professional and public involvement in planning for a rehabilitation facility.

Better utilization of rehabilitation services, both in kind and extent, would come through the development of specific referral, support, and followup programs. With such programs, the amount of time, effort, and money now being expended would cover the rehabilitation needs of a far greater number of disabled persons in a more effective fashion than is currently being accomplished.

Existing legislation has enabled the Federal Government to assist materially in constructing medically oriented facilities. While the need for these continues, the greatest relative need is for the development of psychosocially and vocationally oriented facilities, where progress has been disappointing. Efforts to date are commendable, but when related to need they are on too small a scale and too scattered to provide adequately for these types of rehabilitation services.

Sufficient experience has now been gained in the operation of rehabilitation centers to make a definition of standards possible. Many individuals and agencies need services from rehabilitation facilities. Knowledge as to the scope, function, and quality of the various services available is essential to provide norms for determination of adequacy to meet the needs of the disabled. This makes the maintenance of high standards and some form of accreditation highly desirable.

Appendix I

Scope of Rehabilitation

DISABLING AND HANDICAPPING conditions, both physical and mental, are receiving increased recognition in terms of their needs for medical care and rehabilitation, their influence on social and economic life, and their effect on available manpower. The broadening scope of the rehabilitation process and refinements in rehabilitation techniques are bringing more disabled persons into the sphere of rehabilitation programs. From the concerted efforts of medicine, professional groups, and the general public, vast resources are being brought to bear on the problems of the disabled. Today some 250 rehabilitation centers are providing comprehensive

medical, social, psychological, and vocational services to the handicapped and disabled. Among them are 226 facilities which have received assistance under provisions of the Hill-Burton program. As of December 31, 1962, some 246 projects had been approved for Federal assistance under the provisions of the Hospital and Medical Facilities Survey and Construction Act. (See Appendix III.) In addition, 3,000-3,500 other organizations such as general hospitals, treatment centers, and nursing homes are making some type of rehabilitation services available.

Extent of Disability

MANY ESTIMATES have been made as to the number of handicapped and disabled. All indicate the presence of a large number of persons with some type of identifiable physical or mental disability, who need or who could benefit from some type of service in the rehabilitation process.

National Estimates

Findings of the U.S. National Health Survey, during a 2-year period ending June 1961, indicate that approximately 74 million persons, or 42 percent of the civilian noninstitutional population, have one or more chronic conditions (16).^{*} Of these 74 million, approximately 14.1 million persons, or 8.1 percent of the population, reported an inability or reduced ability

to work, keep house, or go to school, due to chronic illness or impairment. Although not all of these 14.1 million persons have handicaps requiring rehabilitation services, the number does indicate a great need for rehabilitation services and facilities.

The Vocational Rehabilitation Administration estimates that approximately 2.2 million handicapped people 14 years of age and older need and would benefit by vocational rehabilitation to enable them to work in the competitive market, in sheltered workshops, or at home. An estimated 270,000 additional persons enter this vocationally handicapped group each year.

^{*} A condition is considered chronic if it has lasted more than 3 months, or if it is one of the diverse conditions generally classified as chronic by the National Health Survey.

Community Studies

The Kansas City Rehabilitation Experiment has produced data on the "measurement of rehabilitation need" in a metropolitan area (17). From the conditions reported in household interviews conducted in this study, 4.7 percent of the metropolitan Kansas City population or approximately 47,000 persons were estimated as needing some type of rehabilitation. The same study reported that 65.7 percent of the handicapped in metropolitan Kansas City could benefit from rehabilitation, including 40 percent who could be rehabilitated for remunerative purposes.

Types of Disabling Conditions

Chronic disease accounts for 88 percent of all disabling conditions. Included in this category are such diseases as arteriosclerosis, polio-

myelitis, tuberculosis, mental illness, multiple sclerosis, Parkinson's disease, epilepsy, diabetes, cancer, cerebral palsy, arthritis, and various eye disorders (18). Occupational accidents account for 5 percent; home, highway, and all other accidents 5 percent; and congenital conditions 2 percent of the disability among the Nation's population.

In addition to chronic disease resulting in disability, several psychosocial conditions are recognized as needing rehabilitation services. The chronic conditions most frequently reported as causes of activity limitation during 1960 were heart disease, arthritis and rheumatism, impairments of back or spine, hypertension (without heart involvement), mental and nervous disorders, and impairment of vision. For persons who were completely unable to carry on their major activities, paralysis was also a leading cause of such limitation. (See table 2, page 57.)

Existing Programs

Service and Research Programs

Public Agencies

Public agencies at Federal, State, and local levels are engaged in rehabilitation. Their activities include support of direct services; grants for research, demonstrations, and training; and operation of treatment facilities and rehabilitation centers. (Descriptions of the programs of these agencies are included in Appendix II.)

Federal Level.—Federal programs are support programs through grants to State agencies and to specific projects. Agencies having significant rehabilitation programs are:

U.S. Department of Health, Education, and Welfare

Office of Education

Public Health Service

Division of Accident Prevention

Division of Chronic Diseases

Division of Hospital and Medical Facilities
National Institutes of Health

Vocational Rehabilitation Administration

Welfare Administration

Bureau of Family Services

Children's Bureau

The President's Committee on Employment of the Handicapped

Veterans Administration

State Level.—The programs of State governmental agencies are built around the administration of Federal grants for the support of rehabilitation services. Main emphasis is upon the purchase of services needed by the handicapped or disabled who are clients of the various agencies. In a few States, Divisions of Vocational Rehabilitation operate comprehensive facilities with vocational orientation.

Local Level.—Many local public health departments and public welfare agencies are involved in rehabilitation. Activities range from

screening and evaluation clinics, through support of direct services to the operation of rehabilitation facilities.

Independent Facilities (Voluntary)

A major portion of all rehabilitation facilities is provided by local organizations. These include voluntary agencies, without affiliation with national organizations; general hospitals; fraternal and religious groups. Their programs include direct services, third-party purchase of care and treatment for the disabled, and public education. Direct services range from evaluation and referral to the operation of treatment facilities, comprehensive centers, and sheltered workshops. They cover all aspects of long-term care, from medical services to vocational training and job placement. Local treatment facilities frequently offer limited services on a limited or part-time basis. At the other end of the scale, comprehensive centers cover the total spectrum of rehabilitation services and serve the handicapped and disabled over a wide geographical area.

General Hospitals

Rehabilitation services of some type are provided in approximately 8 percent of the non-Federal short-term general and allied special hospitals in the United States (4). Most of these services are located in larger sized hospitals in metropolitan or urban areas. Rehabilitation efforts in these facilities are concentrated on the care and treatment of the physically disabled. Only one-third of the rehabilitation services in general hospitals are equipped to serve psychiatric patients. Few hospitals offer extensive vocational services.

National Voluntary Health Agencies

Support of rehabilitation of the physically and mentally handicapped is a major function of many national voluntary health and rehabilitation agencies. Well-known among them are:

American Cancer Society, Inc.
American Diabetes Association, Inc.
American Foundation for the Blind, Inc.
American Hearing Society
American Heart Association, Inc.
The Arthritis and Rheumatism Foundation
Goodwill Industries of America, Inc.
Muscular Dystrophy Associations of America, Inc.
The National Association for Mental Health, Inc.
The National Association for Retarded Children, Inc.
The National Foundation
National Industries for the Blind
National Multiple Sclerosis Society
National Society for Crippled Children and Adults, Inc.
National Tuberculosis Association.
Sister Elizabeth Kenny Foundation
United Cerebral Palsy Associations, Inc.

The programs of these agencies cover direct services to patients, third-party purchase of rehabilitation services, research, and public education. (See Appendix II for program descriptions.) Direct services include evaluation clinics, treatment facilities, and rehabilitation centers offering comprehensive medical, psychosocial, and vocational services. Most of the agencies concentrate their efforts on a specific disability as implied in the name of the organization. The programs of the National Society for Crippled Children and Adults, the National Foundation, Goodwill Industries, and Sister Elizabeth Kenny Foundation, provide services for multiple disabilities.

Areawide Planning Groups

Areawide planning groups are mechanisms for effective planning of health facilities and services within specific geographical areas. Their objectives are: (1) to promote the establishment of a desirable pattern of services; and (2) to channel resources into the programming and construction of needed services and facilities. The realization of these objectives involves a mutual effort on the part of planning

officials and personnel of existing facilities to define and solve difficult problems.

The functions of areawide planning groups are: (1) to identify and create an awareness of needs; (2) to encourage sound planning to meet existing needs; (3) to coordinate the development of services and facilities in relation to area needs; and (4) to promote support for most needed projects.

The first areawide planning group was established in New York City in the 1930's. Another was formed in Columbus, Ohio, in 1946. Recently similar organizations have been organized in Detroit, Chicago, Kansas City, Pittsburgh and elsewhere. (See Appendix II.) Many of these groups are giving consideration to widening their planning activities to include rehabilitation services and facilities.

Service Agencies

The multitude of problems in the rehabilitation of the physically and mentally handicapped are the concern of many voluntary service agencies. These organizations provide the following types of assistance to rehabilitation facilities and personnel: (1) administrative consultation; (2) program development; (3) maintenance and improvement of quality of services and personnel; and (4) serving as a repository and clearing house for essential data and information. In addition, these service organizations serve as liaison with other health and medical care agencies and as spokesmen for rehabilitation in legislative matters. These agencies include:

American Hospital Association, Inc.
American Medical Association

American Public Health Association
Association for Rehabilitation Centers, Inc.
National Association of Sheltered Workshops and Homebound Programs, Inc.
National Health Council
National Rehabilitation Association.

The programs of some of these organizations are concerned solely with rehabilitation; e.g., Association of Rehabilitation Centers and National Rehabilitation Association. Others provide service programs for rehabilitation facilities as a part of their major activities; e.g., American Hospital Association and the American Medical Association. (See Appendix II for statement on program of each agency.)

Hill-Burton Construction Program

The 1954 amendments to the Hospital and Medical Facilities Survey and Construction (Hill-Burton) Act authorized the appropriation of grants-in-aid funds for the construction of rehabilitation facilities and other long-term care facilities: nursing homes, chronic disease hospitals, and diagnostic and treatment centers. These amendments are administered by State Hill-Burton agencies.

The Community Health Services and Facilities Act of 1961 amended the Hill-Burton legislation to liberalize the granting of aid for the construction of rehabilitation facilities. Under the 1954 amendments rehabilitation funds were available only for centers which could offer medical, psychological, social, and vocational services. Under the new amendments, any eligible facility that offers medical services plus one of the three other services may apply for construction funds.

Appendix II

Existing Rehabilitation Programs

FEDERAL GOVERNMENT AGENCIES

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Washington 25, D.C.

Office of Education

Services for Exceptional Children and Youth

The Exceptional Children and Youth Services of the Office of Education serves as a central place through which information and services on education programs for exceptional children can be channeled. In carrying out its responsibilities, the staff of the section works mainly with State departments of education, colleges and universities preparing teachers of exceptional children, national organizations concerned with handicapped or gifted children, and other government agencies.

The major responsibilities of this office are (1) to collect and disseminate information in all areas of special education, (2) to make studies and provide services of a national character, (3) to identify major problems in the education of exceptional children, (4) to encourage research and action programs, and (5) to provide professional consultative services.

Through fellowship programs, grants are made for the expansion and better preparation of personnel in the field of education for the mentally retarded and the deaf.

Under Public Law 85-926, fellowship grants are awarded to institutions of higher learning to prepare promising persons to conduct (in colleges and universities) programs for the preparation of teachers of the mentally retarded. To each of the 50 States there is an annual allocation of two fellowship grants to recruit and prepare promising persons to direct and supervise programs in the education of the mentally retarded or to teach mentally retarded children.

Under Public Law 87-276, designed "to encourage and facilitate the training of a greater number of teachers of the deaf through grants-in-aid to qualified institutions of higher education," grants are offered to such institutions to award scholarships and to assist the institutions in covering the costs of courses of training.

Public Health Service

Division of Accident Prevention

The Division of Accident Prevention conducts research and epidemiological investigations, collects and analyzes data, and develops programs designed to minimize deaths and injuries from accidents. It also encourages and assists State and local agencies to establish and conduct coordinated accident prevention activities. In addition to these direct operations, it administers a program of research grants for accident prevention.

Epidemiological projects are carried out in several phases of accident causation, and findings are translated into prevention measures. In some areas, prevention programs are being carried out and evaluated both as to results in general and the effect of specific techniques. Accidental injury reporting systems have been established and injuries and deaths are being studied both for the Nation as a whole and for specific areas in cooperation with the National Vital Statistics Division, the National Health Survey Division, and State and local health departments.

Division of Chronic Diseases

The Division of Chronic Diseases provides consultative, educational, training, informational, and other technical assistance to States and communities to assist in the development of better services for the chronically ill and aged. The Division activities cover preventive services and care services both institutional and noninstitutional. Preventive services include efforts for the prevention of the onset and progression of disability associated with long-term illness at all levels: health promotion, physical fitness, multiple screening, periodic health appraisals, and restorative services. The institutional care services phase covers clinical services and administrative management of nursing homes and homes for the aged, and the development of guides for the operation of facilities and for the licensure of nursing homes and homes for the aged. Noninstitutional care includes home health services, including nursing care of the sick at home, homemaker, dental, and nutritional services.

The Division administers grants on an individual project basis to public and nonprofit private agencies for scientific research, field studies and demonstrations, and for training activities in the prevention and control of chronic diseases.

Division of Hospital and Medical Facilities

The Division of Hospital and Medical Facilities of the Public Health Service assists the States in providing adequate hospital and medical facilities through a program of construction grants and loans. These are available for the construction, expansion, or remodeling of hospitals, nursing homes, public health centers, diagnostic and treatment centers, and rehabilitation facilities. Effective methods of utilizing and coordinating health facility services and resources are developed through a program of intramural research and through programs involving grants for research, demonstrations, and experimental construction or equipment. The latter projects are carried out by universities, hospitals, States and their political subdivisions, and other public and private nonprofit institutions and organizations.

Since the inception of the program, planning of health facilities and services has been an integral part of the Division's activities. During the past 2 years, however, the emphasis on the coordination of planning efforts has increased. With the assistance of a series of special committees, the Division has explored the problems and possibilities for action in the field of areawide planning of hospitals and related health facilities, planning of facilities for mental health services, medical schools, and long-term care, as well as rehabilitation services. It is also engaged in a study of tuberculosis hospitals to determine the need for such facilities within the framework of total health facility planning.

National Institutes of Health Bethesda, Md.

Each of the National Institutes of Health conducts fundamental laboratory and research activities concerned with causes, prevention, and diagnostic and treatment methods in its specific area of interest: cancer; cardiovascular and geriatric diseases; allergy and infectious diseases; arthritis and metabolic diseases; dental diseases and conditions; mental illness; and neurological and sensory diseases. Also, through grants and research fellowships, the seven Institutes of the Division of General Medical Sciences, and the Division of Research Facilities and Resources, support research activities of non-Federal institutions and individuals. They also provide for undergraduate and graduate training grants to teaching institutions and traineeships to qualified individuals for advanced, specialized training in health science fields.

The Division of Biologics Standards is responsible for administering controls and conducting research designed to ensure the purity, safety, and potency of the Nation's biologicals. Three other divisions—the Clinical Center, the Division of Research Grants, and the Division of Research Services—provide coordination and common services for all segments of the National Institutes of Health.

Vocational Rehabilitation Administration

The Vocational Rehabilitation Administration assists the States in rehabilitating physically and mentally handicapped individuals so that they may prepare for and engage in remunerative employment to the extent of their capabilities, thereby increasing not only their social and economic well-being but also the productive capacity of the Nation; encourages and supports research (both national and international) and demonstrations by State, public, and other nonprofit agencies in methods and techniques for improving and expanding vocational rehabilitation services to disabled persons; and provides professional training and instruction in technical matters relating to vocational rehabilitation.

Under its programs, grants are made for (1) the basic support of vocational rehabilitation services and for the extension and improvement of these services, (2) research projects, demonstration and special facilities and services, (3) the establishment, expansion or improvement of training programs in the professional fields which contribute to the rehabilitation of disabled people, and (4) the support of research programs in foreign countries.

Welfare Administration

Bureau of Family Services

Programs of the Welfare Administration's Bureau of Family Services directly concerned with rehabilitation are: Aid to the Blind, Aid to the Permanently and Totally Disabled, and Aid to Families With Dependent Children.

Aid to the Blind assists in providing financial assistance to needy blind individuals and in helping them, as far as practicable, to attain self-support or self-care. Through this program, States are encouraged to furnish services to help blind recipients to achieve personal and economic independence and make

maximum use of their capacities; to help the blind person and his family maintain family solidarity; and to make maximum use of available and pertinent community resources. The States, in administering this program, maintain close cooperation with State Vocational Rehabilitation agencies and other agencies to further this objective.

The program for Aid to the Permanently and Totally Disabled is designed to assist in providing financial assistance to needy individuals 18 years of age or older who are permanently and totally disabled. The objective is to help such individuals attain self-support or self-care as far as practicable. The nature of this program requires that primary and continuing attention be given to the rehabilitative potentialities of disabled recipients. Policy, informational, and technical materials are developed and provided to State agencies on the many aspects of administration. The Bureau cooperates with public and private health and vocational rehabilitation organizations and encourages State public assistance agencies to work very closely with State rehabilitation agencies and other organizations to assure that every individual for whom vocational rehabilitation is feasible will have the opportunity to utilize such services. Another primary concern is improved medical care for disabled recipients.

Among the group helped under the Aid to Families With Dependent Children program are children with disabled fathers. These disabled parents are apt to be younger than the disabled on the other programs, and their disabilities generally are not as severe. A primary concern of the Bureau is that services be provided to these disabled parents to minimize or overcome the effects of incapacity and to work toward resumption of family responsibility and support.

Children's Bureau

The Children's Bureau, through its Division of Health Services, administers grants to State health agencies for extending and improving health services for mothers and children, authorized by Title V, Part 1, of the Social Security Act. These agencies use the funds to provide services such as maternity clinics for prenatal and postnatal care of mothers; child health conferences for supervision of the health of children under school age by physicians, assisted by public health nurses and other professional and technical workers in the health field; health services for school children, including health supervision by physicians, dentists, public health nurses, and nutritionists; dental care for children; and programs for mentally retarded children. The Bureau provides medical, dental, nursing, nutrition, physical therapy, and medical social consultation service to State health agencies administering such service.

Through its Division of Health Services, the Children's Bureau administers grants to State crippled children's agencies for extending and improving services for crippled children, authorized by Title V, Part 2, of the Social Security Act. These agencies, usually in State health or welfare departments, use the funds to provide medical, surgical, corrective, and other services and care for children who are crippled or suffering from conditions that may lead to crippling and to provide facilities for diagnosis, hospitalization, and after-care for these children. The Children's Bureau provides consultation service to the State agencies on methods and procedures for the diagnosis and medical

treatment of crippled children and on the development of programs for the care of children with special types of crippling conditions such as epilepsy, poliomyelitis, rheumatic fever, congenital heart disease, and cerebral palsy.

THE PRESIDENT'S COMMITTEE ON EMPLOYMENT OF THE HANDICAPPED

Washington 25, D.C.

The purpose of the President's Committee on Employment of the Handicapped is the promotion of the employment of the physically and mentally disabled through creation of nationwide interest in their rehabilitation and employment. Composed of private citizens representing business, labor, industry, civic groups, professional, and religious groups, the Committee maintains a continuing program of public information and education. It also cooperates with all groups interested in the employment of the handicapped including governmental agencies, private groups, and individuals.

Among the activities of the Committee are the publication of a monthly magazine; the development of guide materials for use by States and communities in their planning; and the development of programs for furthering the employment of the handicapped. The Committee also prepares and distributes articles, films, recordings and other informational and educational material designed to promote interest in or understanding of the employment potentialities of the disabled.

VETERANS ADMINISTRATION

Washington 25, D.C.

The Veterans Administration maintains hospitals, outpatient clinics, orthopedic shops, and a prosthetics center which provide for the needs of handicapped veterans. Primary responsibility for meeting these needs is assigned to Physical Medicine and Rehabilitation Services and Counseling Psychology of the Department of Medicine and Surgery, and to the Vocational Rehabilitation and Education Service of the Department of Veterans Benefits.

The Department of Veterans Benefits also administers a program of educational assistance for handicapped orphans of veterans whose death was service-connected. This program includes provisions for restorative training in such areas as sight, speech and hearing, and for vocational counseling and specialized training.

The Veterans Administration also carries on programs in medical research and provides affiliating programs for clinical training in the paramedical fields related to physical medicine and rehabilitation.

VOLUNTARY AGENCIES

American Cancer Society, Inc.

521 West 57th Street

New York 19, N.Y.

The American Cancer Society contributes to the control of cancer through a three-point program of research, education and service. The research program supports scientific efforts in the cause, cure, and prevention of cancer. The education program provides fellowships and training grants and disseminates lay and professional information on cancer. The service program operates local registries and information centers, provides financial support to hospitals and diagnostic treatment services, and assists cancer patients in financial need.

The Society provides funds and services for the rehabilitation of cancer patients in those areas where volunteer services and other community resources are not available. It stimulates and supports the development and the laryngectomy rehabilitation activities of "Cured Cancer Clubs" throughout the Nation and sponsors the International Association of Laryngectomees. Informational material concerning patient rehabilitation for particular types of surgery is developed and provided to physicians and, in turn, their patients.

American Diabetes Association, Inc.

1 East 45th Street

New York 17, N.Y.

The primary purposes of the American Diabetes Association are professional education, patient education, public education and casefinding, and research. The program of this organization provides for the advancement of professional knowledge on diabetes mellitus through scientific meetings, post-graduate courses, and a bimonthly scientific journal, *Diabetes*; expansion of patient education through a bimonthly magazine for diabetics and their families, the *American Diabetes Association Forecast*, and other nonserial publications; intensification of public education and casefinding through the Diabetes Detection Drive; and further development of a research fellowship program.

American Foundation for the Blind, Inc.

15 West 16th Street

New York 11, N.Y.

The American Foundation for the Blind initiates and conducts research; assists local agencies through consultation; offers fellowships; publishes professional and popular educational matter. It manufactures and sells at cost Talking Books, special aids, and appliances. It is active in personnel recruitment; encourages professional development through training courses, institutes, and workshops.

American Hearing Society
919 18th Street NW.
Washington 6, D.C.

This agency is primarily concerned with conservation of hearing and speech, the early identification and prevention of all hearing and speech problems, and rehabilitation services necessary for both children and adults who are beset by these disorders. The Society sponsors a continuous program of public information and education on the subject of communication handicaps, and works closely with other public and private agencies and organizations involved with health, education, and rehabilitation activities.

It promotes school health, maternal and child health, and rehabilitative programs and participates in research activities through its affiliated hearing and speech centers, and in liaison with Federal agencies. Direct therapeutic services are provided to individuals by member organizations of the Society in communities throughout the Nation. These services include assessment, correctional training, and vocational counseling.

American Heart Association, Inc.
44 East 23d Street
New York 10, N.Y.

The program of the American Heart Association embraces research, medical, other professional and lay education and community service. Financial support is provided for research on heart diseases and other cardiovascular ailments. The professional educational program encompasses national and local scientific meetings, professional publications, teaching aids, and standards for professional guidance. Lay education involves the dissemination of practical and authoritative information on heart disease.

The rehabilitation activities of the Association's community service program encompass: vocational counseling, work simplification, industrial and agricultural programs, cardiac work evaluation units, projects for the senior cardiac which include stroke and home care activities, support of rehabilitation facilities, and training programs of many kinds. Also included under community service are rheumatic fever prophylaxis, support of community projects, and school health and health career programs.

The Arthritis and Rheumatism Foundation
10 Columbus Circle
New York 19, N.Y.

The Foundation provides financial assistance for basic and clinical research, fellowships, and traineeships on the cause and cure for arthritis and other rheumatic diseases. The national headquarters of the organization finances an "Arthritis Self-Help Device Center" at the Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center. The agency has an extensive public education program. It conducts arthritis registrations and professional education activities including forums, workshops, traineeships and teaching programs. Foundation chapters subsidize hospital beds for teaching and treatment, rehabilitation facilities and home care programs through mobile units.

Goodwill Industries of America, Inc.

1913 N Street NW.

Washington 6, D.C.

Goodwill Industries of America, Inc. is concerned with the education of the public on the vocational needs of handicapped people and with the development and operation of its vocational training and employment program. It encourages and assists in the development of programs of local Goodwill Industries, assists in the development and maintenance of standards, and provides opportunities for the exchange of professional experiences. The agency coordinates a network of voluntary nonprofit rehabilitation workshops serving all types of handicapped men and women. The workshops provide such services as job training, sheltered employment, vocational and personal counseling, job evaluation, religious guidance. Outlet stores are operated for articles produced in these workshops.

Muscular Dystrophy Associations of America, Inc.

1790 Broadway

New York 19, N.Y.

The Muscular Dystrophy Associations of America sponsors research in neuromuscular diseases through basic and applied research into nerve, muscle, and metabolism. The agency holds periodic national medical conferences, symposia, and demonstrations. Educational material for medical and lay publics are available through the national office. The agency also sponsors a national network of Muscular Dystrophy Clinics in hospitals. A variety of services including diagnosis and evaluation; social service; physical therapy; occupational, vocational, and recreational guidance; and educational programs are provided.

The National Association for Mental Health, Inc.

10 Columbus Circle

New York 19, N.Y.

This agency has its major interest in research, services, and education in the field of mental illness. Its purposes are to stimulate and organize community programs and work for the improvement of methods and services in research, prevention, detection, diagnosis, and treatment of mental illness and handicaps, and to promote mental health. The Association promotes, finances, and coordinates research activities. State and local mental health associations sponsor a variety of direct services, such as social and vocational readjustment programs for psychiatric patients returning to the community, information and referral services, volunteer services in hospitals and clinics, special services for mentally ill children, and others. The national headquarters carries on several national activities in the support of State and local programs.

The National Association for Retarded Children, Inc.

386 Park Avenue South

New York 16, N.Y.

This agency supports programs of direct services and scientific research. The research program, maintained by its national office, is directed toward the prevention and amelioration of mental retardation, and improved evaluation, education, rehabilitation, and management of the mentally retarded child and adult. Local affiliates sponsor and operate diagnostic and counseling services, preschool programs, special classes for mentally retarded children, sheltered workshops, recreation programs, activity programs and other essential programs. The national office provides consultation services in all of these areas, prepares written reports and publications, and works closely with all other national and international organizations in the broad area of health, education, and welfare.

The National Foundation

800 Second Avenue

New York 17, N.Y.

The National Foundation seeks to improve the level of care for all patients with arthritis and birth defects by national grant support of Clinical Study Centers throughout the United States. Grants are made to teaching institutions for conducting clinical research, teaching, and providing exemplary patient care. National grants continue to support Poliomyelitis, Respiratory, and Rehabilitation Centers. Chapters of the National Foundation may make grants to qualified institutions to establish special treatment centers or evaluation clinics for arthritis and birth defects. Such centers are limited to provision of exemplary care and do not conduct research.

Chapters with sufficient funds may assist eligible patients with poliomyelitis, arthritis, and birth defects with payment for needed patient care. Poliomyelitis patients may be aided without regard to age; assistance for patients with arthritis and birth defects is currently limited to those under age 19. The National Foundation supports a national program of research and education in poliomyelitis, arthritis, birth defects, virus diseases, and disorders of the central nervous system.

National Industries for the Blind

15 West 16th Street

New York 11, N.Y.

National Industries for the Blind provides professional consultation and assistance on the organization and operation of workshops for the blind. It develops opportunities for the gainful employment of blind workers and stimulates national markets for the sale of authentic blind-made products. It conducts new product research and conducts public information programs on a national level. It also allocates government orders under the Wagner-O'Day Act.

National Multiple Sclerosis Society
257 Park Avenue South
New York 10, N.Y.

The National Multiple Sclerosis Society supports research on cause, prevention, alleviation, and cure of multiple sclerosis and related diseases of the central nervous system. It sponsors a Central Registry of Pathological Material at Montefiore Hospital, New York, to assist research activities, and provides research fellowships. In its educational program, the Society distributes scientific reports, manuals, nontechnical information and other literature to physicians and other professional people, and to patients and the general lay public.

National Society for Crippled Children and Adults, Inc.
2023 West Ogden Avenue
Chicago 12, Ill.

Founded in 1921, this organization, also known as the Easter Seal Society, conducts a three-point program of direct service, education, and research. Its major emphasis is on services in the community for crippled children and adults in the fields of health, welfare, education, recreation, rehabilitation, and employment. Some 1,400 State and local affiliates operate or support facilities and programs in these fields. Educational programs provide for recruitment, training, and placement of professional rehabilitation personnel, and for the exchange of professional knowledge through a national library and the publication of a monthly journal, *Rehabilitation Literature*. Special publications and programs are directed toward the education of parents of crippled children. The general public is reached through mass media and a wide variety of published materials. The Easter Seal Research Foundation conducts a program of grants for research into the causes of crippling, the prevention and treatment of physical and associated disabilities, and improved methods of care, treatment, and education of crippled children and adults.

National Tuberculosis Association
1790 Broadway
New York 19, N.Y.

The National Tuberculosis Association is concerned with the causes, treatment, and prevention of tuberculosis and other respiratory diseases. The national office provides grants and research fellowships for medical and social research. It also supports professional education activities in the treatment and prevention of tuberculosis and other respiratory diseases. The activities of affiliated associations include case detection, rehabilitation, education, and research. Staff consultation and educational materials are available to affiliates from the national office.

Sister Elizabeth Kenny Foundation
1800 Chicago Avenue
Minneapolis, Minn.

The programs of the Sister Elizabeth Kenny Foundation are devoted to the restoration of the chronically ill and the severely handicapped, particularly those afflicted with poliomyelitis and other neuromuscular and skeletal disabilities and disorders. Through its subsidiary organization, the American Rehabilitation Foundation, it maintains committees, composed of authorities in the field of rehabilitation, who assist and encourage further developments in the scope and quality of rehabilitative services.

The Sister Elizabeth Kenny Foundation cooperates with other organizations and agencies interested in rehabilitation, and supports and carries out research, training, educational and patient-care activities through programs providing grants, and services. Rehabilitation facilities maintained by the Foundation are located in Minneapolis, Detroit, and Jersey City.

United Cerebral Palsy Associations, Inc.
321 West 44th Street
New York 36, N.Y.

The primary purpose of this agency is to promote the treatment, education, and habilitation of persons with cerebral palsy. Medical diagnostic and treatment centers, prenursery programs, special education facilities, recreational programs, and vocational guidance and placement services have been developed by local affiliates. These affiliates utilize existing facilities as much as possible. Local organizations also provide for parent education and counseling. A grant-in-aid program promotes the training of physicians, educators, and therapists. The agency has developed a broad program of research support in the basic and clinical sciences, in special education and related behavioral sciences, and in vocational habilitation.

AREAWIDE PLANNING COUNCILS FOR HOSPITALS AND RELATED HEALTH FACILITIES

I. Hospital planning associations whose activities are devoted exclusively to planning:

Charleston Studies Foundation, Inc.
1523 Kanawha Valley Building
300 Capitol Street
Charleston, W. Va.

Cleveland Joint Hospital Committee
Staff services performed by
Welfare Federation of Greater Cleveland
1001 Huron Road
Cleveland 5, Ohio

Hospital and Health Council of Newark
and Vicinity
45 Branford Place
Newark 2, N.J.

Hospital Planning Association of
Allegheny County
1046 Union Trust Building
Pittsburgh 19, Pa.

Hospital Planning Association of
Greater Toledo
2243 Ashland Avenue
Toledo 10, Ohio

Hospital Planning Council for
Metropolitan Chicago, Inc.
79 West Monroe Street
Chicago 3, Ill.

Hospital Review and Planning Council
of Southern New York
3 East 54th Street
New York 22, N.Y.

Hospital Review and Planning Council
of Western New York, Inc.
235 North Street
Buffalo 1, N.Y.

Kansas Health Facilities Information
Service
1133 Topeka Boulevard
Topeka, Kans.

Metropolitan St. Louis Hospital
Planning Commission, Inc.
407 North Eighth Street
St. Louis 1, Mo.

Metropolitan Washington Health
Facilities Planning Council, Inc.
704 17th Street NW.
Washington 6, D.C.

St. Paul Hospital Planning Council
300 Wilder Building
Fifth and Washington Street
St. Paul 2, Minn.

II. Hospital councils engaged in planning and membership council functions:

Birmingham Regional Hospital Council
930 South 20th Street
Birmingham 5, Ala.

The Columbus Hospital Federation
1666 East Broad Street
Columbus 16, Ohio

Greater Detroit Area Hospital
Council, Inc.
1084 Penobscot Building
Detroit 26, Mich.

The Hospital Council of Lackawanna
County
Myer Davidow Memorial Building
615 Jefferson Avenue
Scranton 10, Pa.

Hospital Council of Maryland, Inc.
22 Light Street
Baltimore 2, Md.

Hospital Council of Southern California
4747 Sunset Boulevard
Los Angeles 27, Calif.

Kansas City Area Hospital Association
3637 Broadway
Box 169
Kansas City 41, Mo.

Rochester Regional Hospital Council
154 East Avenue
Rochester 4, N.Y.

SERVICE AGENCIES

American Hospital Association, Inc.

840 North Lake Shore Drive

Chicago 11, Ill.

The Association's objective is to promote the development of better hospital care for all people. To achieve this aim, the organization acts as a medium for exchange and dissemination of information within the health and hospital fields; aids in health education of the public; encourages medical and hospital research; and actively assists allied organizations in developing health programs. As part of its national educational program, the Association publishes periodicals, manuals, monographs and special reports, and also conducts institutes for hospital personnel on the various aspects of hospital administration and operation. It conducts studies relating to hospital medical services, including rehabilitation, and maintains close liaison with medical, nursing, and other professional organizations to raise standards of care.

American Medical Association

535 North Dearborn Street

Chicago 10, Ill.

The basic objectives of the American Medical Association are to promote the science and art of medicine and to aid in the betterment of public health. Programs and developments in the field of rehabilitation are the concern of the Association's Committee on Rehabilitation. This Committee is a standing committee of the Board of Trustees.

The Committee, with the assistance of its advisers in the various medical specialty fields, gathers and disseminates information which aids the medical profession in evaluating the therapeutic and diagnostic value of certain devices and methods used in medicine. Guided by the information gathered through investigative procedures, the Committee advises the manufacturer on the efficacy of its apparatus and on the accuracy of claims made in advertising. In addition, it encourages the development of facilities for training physiatrists, physical and occupational therapists, and promotes research in biophysics as related to therapeutic and diagnostic devices.

American Public Health Association

1790 Broadway

New York 19, N.Y.

The American Public Health Association is made up of persons interested or professionally engaged in public health work. The Association seeks to promote the maximum well-being of all people by helping (1) to increase the competence of individuals, families, and communities to cope with their own health problems; (2) to develop an environment which will protect and promote optimum health; (3) to maintain and improve the effectiveness of health

services; and (4) to assure the availability of high-quality medical care for all segments of the population.

Within its professional committee structure, the Association maintains several committees having a direct interest in rehabilitation. These include the Program Area Committees on Chronic Disease and Rehabilitation, Child Health, Medical Care Administration.

Publications of the Association in the area of rehabilitation include: *Guide to a Community Health Study*; *Chronic Disease and Rehabilitation: A Program Guide for State and Local Health Agencies*; *Services for Handicapped Children: A Guide for Public Health Personnel*; and "Rehabilitation—Everyone's Concern."

The Association, in cooperation with the National Health Council, is sponsoring the newly activated National Commission on Community Health Services, which will study community health services in terms of present and future needs and available resources. In cooperation with the National Rehabilitation Association, the Association is sponsoring a series of regional conferences and a national conference on public health and rehabilitation.

In addition, the Professional Examination Service of the Association has examinations for a variety of professional persons employed by rehabilitation agencies.

Association of Rehabilitation Centers, Inc.

**828 Davis Street
Evanston, Ill.**

The purpose of the Association is to develop and improve services of rehabilitation centers and facilities to handicapped and disabled persons by providing for mutual consultation, study and exchange of ideas; providing a basis of unity and common action; and cooperating with other professional associations and agencies in the advancement of rehabilitation. The organization contributes to the improvement and expansion of rehabilitation services by promoting research, development, and professional education at State, national, and local levels.

The National Association of Sheltered Workshops and Homebound Programs, Inc.

**1029 Vermont Avenue NW.
Washington, D.C.**

The objectives of the National Association of Sheltered Workshops and Homebound Programs are to establish and maintain high standards of service to handicapped people in work programs, and to demonstrate the significance of workshop services in the rehabilitation process.

The Association carries on its educational and service functions through national and regional program meetings; the publication of a quarterly Bulletin; work on joint projects with other established groups in rehabilitation—local, State and national, voluntary and public. The Association is currently engaged in developing standards for sheltered workshops. In working with those offering related services, the Association emphasizes the place of shel-

tered workshops in the total rehabilitation pattern and highlights the needs of homebound handicapped people.

National Health Council

1790 Broadway

New York 19, N.Y.

This is a membership agency of national voluntary and professional health organizations, governmental agencies and other national groups interested in and concerned with health. The Council's basic purposes are: to help its member agencies work together more effectively in the common interest; to help identify, call attention to, and promote solutions of national health problems; and to promote better State and local health services, governmental and voluntary.

National Rehabilitation Association

1025 Vermont Avenue NW.

Washington 5, D.C.

The activities of the National Rehabilitation Association consist of the promotion in all practical ways of a complete program for the rehabilitation of all physically and mentally handicapped persons, and the professional improvement of workers with handicapped persons. Membership of the Association includes both individuals and organizations.

Studies are currently underway in the areas of Workmen's Compensation and Rehabilitation, Workshop Standards, Accreditation of Rehabilitation Facilities, Patterns of Services in the State-Federal Rehabilitation Program, and Coordination of Services for Handicapped Children.

Appendix III

Hill-Burton Program

THE HOSPITAL SURVEY AND CONSTRUCTION ACT (Public Law 79-725) enacted in 1946, launched a comprehensive effort of Federal, State, and local cooperation to provide adequate hospital and related health facilities for the Nation. This legislation provides for two major stages of action. In the first stage, each State annually obtains information on existing facilities and develops a comprehensive plan for the con-

struction of needed additional facilities. In the second stage, Federal allotments are made annually to States for their allocation to local sponsors, either public or nonprofit, on a grants-in-aid basis, to assist in the construction of projects programed in the State plan. A few States have appropriated funds to provide additional assistance to approved projects.

Rehabilitation Category

THE MEDICAL FACILITIES SURVEY AND CONSTRUCTION ACT of 1954 (Public Law 83-482) broadened the Hospital Survey and Construction Act by authorizing the appropriation of categorical funds for the construction of nursing homes, rehabilitation facilities, chronic disease hospitals, and diagnostic and treatment centers. An annual appropriation of \$10 million for rehabilitation facilities was authorized.

Appropriations are allotted to States on a formula, based on population and per capita incomes. Federal matching funds may vary from a minimum of 33 $\frac{1}{3}$ percent to a maximum of 66 $\frac{2}{3}$ percent of the cost of constructing and equipping an approved project. The percentage of assistance is determined by each State. Funds appropriated for rehabilitation facilities may be transferred from one State to another. They are not transferrable to other types of facilities eligible for Hill-Burton assistance.

Under the 1954 amendments a rehabilitation facility was defined as: "A facility providing community service which is operated for the primary purpose of assisting in the re-

habilitation of disabled persons through an integrated program of medical, psychological, social, and vocational evaluation and services under competent professional supervision. The major portion of such evaluation and services must be furnished within the facility; and the facility must be operated either in connection with a hospital or as a facility in which all medical and related health services are prescribed by or are under the general direction of, persons licensed to practice medicine or surgery in the State."

The Community Health Services and Facilities Act (Public Law 87-395) of 1961, amended the definition of a rehabilitation facility to make projects eligible for Federal assistance if they program medical evaluation and services and one or more of the following: psychological, social, or vocational evaluation and services.

The types of rehabilitation facilities eligible for construction with categorical grants-in-aid are:

1. Rehabilitation facilities (multiple disability) in a hospital.

2. Separate rehabilitation facilities (multiple disability) for inpatients and outpatients.

3. Separate rehabilitation facilities (multiple disability) for outpatients only.

4. Single disability rehabilitation facilities.

Administration

THE REHABILITATION CATEGORY is administered on Federal and State levels. At the Federal level, it is the joint responsibility of the Public Health Service and the Vocational Rehabilitation Administration as designated by the Secretary of the Department of Health, Education, and Welfare. Both the Public Health Service and the Vocational Rehabilitation Administration have delegated to their respective Regional offices authority to approve projects, subject to consultation and review by the central offices. Daily operations are carried out by the Division of Hospital and Medical Facilities through its Regional offices. As in all Hill-Burton projects, approval of applications of local sponsors by the Regional offices of the Public Health Service and the Vocational Rehabilitation Administration follows approval by State Hill-Burton agencies.

An equally important administrative function of the Federal Regional offices is consulta-

tion, providing technical and resource assistance to the official State agencies in planning and developing a State program for the construction of needed facilities. Through the official State agencies the Regional offices also have a prime function in planning, developing, and implementing programs for the construction of specific projects.

The original Hill-Burton legislation required the designation of an official State agency to carry out administrative functions at the State level. In most States, the State Health Departments have been so established either by legislation or gubernatorial designation under existing legal authority. In the rehabilitation category, State Vocational Rehabilitation agencies provide consultation and advice and make recommendations to the State Hill-Burton agency on overall planning of facilities and services as well as the development of individual projects.

The Current Situation

UNDER THE REHABILITATION category of the Hill-Burton program, 246 projects had been approved for Federal aid as of December 31, 1962. Of these 246 projects, 95 are new facilities and 151 are additions or alterations to existing facilities. Since some of the facilities received assistance for additions and alterations in more than one project, the number of rehabilitation facilities aided totaled 226, slightly less than the total number of projects. The total cost of the projects is approximately \$150 million with the Federal share about \$50 million. Of the 226 facilities involved, 177 are multiple disability

rehabilitation centers. Seventy-five projects are (a) in teaching hospitals owned and operated by medical schools or universities; (b) in teaching hospitals with medical school affiliations; or (c) in teaching hospitals approved for interns and/or residents.

Since 1954, the appropriations in the rehabilitation category have ranged from \$4 to \$10 million annually. From 1954 through June 30, 1963, a total of \$63 million has been allocated to States for the construction of rehabilitation facilities.

As of January 1, 1962, State plans for the Hill-Burton program showed that 439 comprehensive rehabilitation facilities providing medical, psychological, social, and vocational services were required to meet the needs of the disabled. Of this number, 219 are already in existence and an additional 220 are needed.

In a recent study of the programs, staffing, and services for the disabled provided by its member facilities, the Association of Rehabilitation Centers, Inc., obtained information from 45 facilities which had received Hill-Burton assistance (10). In 32 of these 45 facilities, approximately two-thirds of the disabled persons served in the reporting year were under 45 years of age. The distribution was as follows: under 15 years, 31 percent; 16-44 years, 34 percent; 45-61 years, 22 percent; and 62 years and over, 13 percent.

Nearly three-fourths of the admissions in 39 centers were involved with the following disabilities: cardiovascular conditions 9.5 percent; lower back and cervical spine syndrome 8.5 percent; disorders of the organs of movement 7.6 percent; speech and learning disorders 6.3

percent; cerebral palsy 6.0 percent; arthritis and rheumatism 5.8 percent; muscular dystrophy 5.5 percent; poliomyelitis 5.0 percent; mental conditions, including emotional disorders and mental retardation 7.8 percent; spinal cord lesions 5.1 percent; absence or loss of limb 5.5 percent.

In 45 facilities the distribution by program activity of professional staff providing professional services was: physical restoration 79 percent; psychosocial services 6 percent; vocational services 7 percent; speech and hearing services 3 percent; educational and diversional services 2 percent; and other patient services 3 percent.

In 29 centers providing nursing beds, 22 reported private physicians as the major source of patient referral. Among 14 outpatient centers, 9 reported private physicians as the first ranking source of referrals.

Student training affiliations in medical residency, physical therapy, nursing, occupational therapy, and vocational rehabilitation counseling were available in more than 40 percent of 32 facilities reporting on this item.

Appendix IV

Tables and Exhibits

Table 1.—Prevalence of Chronic Illness: Persons With Limitation of Activity Due to Chronic Conditions, by Age, United States, July 1959–June 1961

Age	Persons with one or more chronic conditions						
	Total population	Total	No activity limitation	Having some activity limitation			
				Total	Not in major activity ¹	In amount or kind of major activity ¹	Unable to carry on major activity ¹
	Number of persons (000's)						
All ages	176,302	73,849	54,577	19,273	5,056	10,243	3,974
Under 17	61,911	11,116	9,996	1,120	580	407	133
17-44	63,068	28,596	23,943	4,652	1,630	2,600	422
45-64	35,989	22,068	15,475	6,593	1,803	3,745	1,045
65 and over	15,334	12,070	5,162	6,908	1,043	3,491	2,374
	Percent distribution of persons						
All ages	100.0	41.9	31.0	10.9	2.9	5.8	2.3
Under 17	100.0	18.0	16.1	1.8	.9	.7	.2
17-44	100.0	45.3	38.0	7.4	2.6	4.1	.7
45-64	100.0	61.3	43.0	18.3	5.0	10.4	2.9
65 and over	100.0	78.7	33.7	45.1	6.8	22.8	15.5

¹ Major activity refers to ability to work, keep house, or go to school.

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, National Health Survey. Chronic Conditions Causing Limitation of Activities, United States, July 1959-61, Health Statistics Series B—No. 36. Washington, D.C., U.S. Government Printing Office, October 1962, p. 19.

Table 2.—Prevalence of Chronic Conditions: Selected Chronic Conditions Causing Activity Limitation, Fiscal Year 1960

Chronic conditions reported as causing limitation ¹	Limitation of activity					
	All degrees of limitation	Limited in amount or kind of activity	Unable to carry on major activity	All degrees of limitation	Limited in amount or kind of activity	Unable to carry on major activity
	Number of conditions (000's)			Percent of persons reporting condition ²		
Persons limited.....	18,440	14,521	3,919	100.0	100.0	100.0
Heart disease.....	3,105	2,184	920	16.8	15.0	23.5
Arthritis and rheumatism.....	2,991	2,372	619	16.2	16.3	15.8
Mental and nervous disorders...	1,314	1,015	299	7.1	7.0	7.6
High blood pressure without heart involvement.....	1,260	1,022	238	6.8	7.0	6.1
Impairment of back or spine....	1,162	1,052	110	6.3	7.2	2.8
Impairment of vision.....	1,018	613	405	5.5	4.2	10.3
Asthma and hay fever.....	982	807	175	5.3	5.6	4.5
Paralysis of extremities and/or trunk.....	630	268	362	3.4	1.8	9.9
Hernia.....	554	421	133	3.0	2.9	3.4
Ulcer of stomach or duodenum..	483	382	100	2.6	2.6	2.6
Sinusitis or bronchitis.....	457	398	59	2.5	2.7	1.5
Diabetes mellitus.....	425	306	119	2.3	2.1	3.0
Impairment of hearing.....	374	249	125	2.0	1.7	3.2
Benign and unspecified neoplasms.....	271	213	57	1.5	1.5	1.5
Malignant neoplasms.....	226	128	99	1.2	.9	2.5
Tuberculosis, all forms.....	163	106	56	.9	.7	1.4
Absence of major extremities...	122	89	34	.7	.6	.9

¹ A condition is considered chronic if it has lasted for more than three months or if it is one of the diverse conditions generally classified as chronic by the National Health Survey.

² Percentages may add to more than 100 because a person can report more than one condition as the cause of his limitation; on the other hand, they may add to less than 100 since only conditions frequently reported are included in these data.

Source: U.S. Department of Health, Education, and Welfare, Office of the Secretary, Health, Education, and Welfare Trends: 1962 Edition, Washington, D.C., U.S. Government Printing Office, 1962, p. 15. (U.S. National Survey data).

**Table 3.—Rehabilitation Center Projects, Approved Under the Hill-Burton Program
Through December 31, 1962**

State	Number of projects	Cost (000's)		State	Number of projects	Cost (000's)	
		Total	Federal share			Total	Federal share
United States and possessions.....	246	\$150,227	\$50,347	Montana.....	2	287	115
Alabama.....	6	3,139	1,970	Nebraska.....	4	2,258	488
Arizona.....	3	919	460	New Hampshire.....	4	1,773	496
Arkansas.....	6	2,148	1,211	New Jersey.....	8	5,551	1,220
California.....	9	9,024	2,395	New Mexico.....	5	1,281	498
Colorado.....	5	1,358	501				
Connecticut.....	4	1,893	410	New York.....	7	7,840	2,273
Delaware.....	2	605	190	North Carolina.....	8	3,229	1,821
District of Columbia..	5	2,595	499	North Dakota.....	4	1,341	610
Florida.....	12	11,498	1,405	Ohio.....	5	4,288	1,359
Georgia.....	8	4,743	2,527	Oklahoma.....	4	1,370	663
Hawaii.....	2	1,122	422	Oregon.....	2	480	192
Idaho.....	1	310	154	Pennsylvania.....	9	8,201	2,757
Illinois.....	5	4,587	1,469	Rhode Island.....	4	937	229
Indiana.....	7	3,934	1,166	South Carolina.....	3	803	462
Iowa.....	5	2,653	879	South Dakota.....	2	869	428
Kansas.....	4	1,820	792	Tennessee.....	5	3,677	1,631
Kentucky.....	2	5,213	890	Texas.....	19	6,155	2,641
Louisiana.....	8	2,752	1,261	Utah.....	3	1,648	810
Maine.....	2	1,062	251	Vermont.....	2	869	298
Maryland.....	5	1,988	662	Virginia.....	6	3,790	1,302
Massachusetts.....	5	3,305	1,283	Washington.....	3	2,590	1,001
Michigan.....	5	4,255	1,726	West Virginia.....	6	1,926	759
Minnesota.....	5	4,468	1,356	Wisconsin.....	5	5,190	984
Mississippi.....	2	1,205	804	Wyoming.....	1	345	172
Missouri.....	5	5,143	1,274				
				Puerto Rico.....	2	1,790	1,181

Source: U.S. Department of Health, Education, and Welfare, Division of Hospital and Medical Facilities.

Table 4.—Average Cost Per Inpatient Day in Five Inpatient Centers by Type of Service as of the Study Period ¹

Type of service	Average cost	
	Median	Range among centers
Total inpatient service.....	\$21.88	\$11.60-30.06
Nursing and room.....	8.92	5.09-13.27
Meals.....	3.34	1.47- 4.43
Therapeutic services.....	7.96	2.61-13.07

¹ Mott carried out his field studies in 1956-57. During the period 1956-61, cost per patient day in non-Federal short-term general and special hospitals increased 34.4 percent and in long-term facilities 40.3 percent.

Source: Mott, Basil J. F. et al—Financing and Operating Rehabilitation Centers and Facilities. National Society for Crippled Children and Adults, Inc., Chicago, 1960.

Table 5.—Average Cost Per Patient Visit by Service Department as of the Study Period ¹

Department	Number of departments	Average cost	
		Median	Range among centers
All departments.....	—	\$7.78	\$3.66-11.38
Psychology.....	7	15.46	6.25-45.62
Vocational counseling.....	7	8.44	3.77-19.30
Social service.....	9	7.98	5.07-19.78
Group work.....	1	7.93	—
Vocational evaluation.....	8	7.78	5.59-52.70
Home service occupational therapy....	1	7.55	—
Physical therapy.....	10	4.76	2.30- 6.95
Speech.....	10	4.59	2.76-12.71
Occupational therapy.....	10	4.39	2.64- 6.77
Vocational training...	2	4.09	3.11- 5.08
Preschool occupational therapy.....	2	2.70	1.66- 3.73
Recreation.....	2	1.91	1.12- 2.69

Footnote and source are the same as table 4.

Table 6.—Percent of Total Fees Paid by Third Parties by Source of Payment for a One-Year Period

Source of payment	Inpatient centers		Outpatient centers	
	Percent*	Range among centers (percent)	Percent*	Range among centers (percent)
All sources.....	85	80-90	65	26-88
State vocational rehabilitation agencies.....	29	4-83	28	1-60
Insurance companies and self-insurers.....	20	3-51	19	2-38
U.M.W. health and retirement fund.....	23	0-54	0	—
Voluntary health agencies.....	9	1-21	10	0-25
Other.....	4	2- 8	8	0-18

*Computed by averaging the individual center percentages.

Source: Same as table 4.

Table 7.—Percent Distribution of Operating Income by Type of Support and Income for a One-Year Period

Type of support and income	Inpatient centers		Outpatient centers	
	Percent*	Range among centers (percent)	Percent*	Range among centers (percent)
Total income.....	100	—	100	—
Self-support.....	82	74-96	37	27-44
Fees for services to patients.....	77	73-82	24	9-44
Sales and rent.....	5	†-19	13	†-22
Subsidy.....	18	4-26	63	56-73
Contributions.....	6	1-14	33	7-55
Grants.....	12	4-25	27	9-52
Securities and investments.....	(†)	0- 1	3	0-12

*Computed by averaging the individual center percentages.

†Less than 1/2 of 1 percent.

Source: Same as table 4.

Table 8.—Specialties of Medical Director in Rehabilitation Centers Reporting Such a Staff Member ¹

Specialty	Number reported		
	Full time	Part time	Total
All specialties.....	42	60	102
Physical medicine and rehabilitation.....	30	20	50
Orthopedist.....	3	15	18
Neurologist.....	—	2	2
Internal medicine.....	2	8	10
Pediatrician.....	2	2	4
General.....	3	6	9
Other.....	—	4	4
Unidentified.....	2	3	5

¹ The specialties of the medical directors are significant. By far the largest number of the medical directors, both full time and part time, represent the specialty of physical medicine and rehabilitation. There were scattered representatives of other medical specialties with a pronounced tendency for the part-time medical directors to represent a larger variety of medical specialties.

Source: Office of Vocational Rehabilitation, "Medical and Related Services in Rehabilitation Centers," U.S. Department of Health, Education, and Welfare. Prepared by Rehabilitation Facilities Staff, in collaboration with Division of Statistics and Studies, Office of Vocational Rehabilitation, February 27, 1961. The study was conducted through the membership of the Association of Rehabilitation Centers, Inc.

Table 9.—Supervision in Rehabilitation Centers by Type of Service and Type of Personnel

Inpatient facilities ¹ —supervision by registered nurse	Number reporting
Total inpatient facilities.....	59
Have 24-hour service.....	57
Do not have 24-hour service.....	2
Treatment services ² —supervision by registered therapists	
Total facilities reporting.....	106
Physical therapy.....	102
Occupational therapy.....	100
Speech therapy.....	90

¹ In the case of inpatient facilities, 24-hour supervision by a registered nurse may be considered a critical factor. Fifty-nine centers reported inpatient services and of these all but two offered 24-hour supervision by a registered nurse; 47 centers reported no inpatient services.

² The extent to which treatment services are supervised by registered therapists is thought to be important. Of the 106 centers responding, an overwhelming number said they offered services in physical therapy, occupational therapy, and speech therapy under the direction of registered therapists. A small minority offered these services on some other basis.

Source: Office of Vocational Rehabilitation, "Medical and Related Services in Rehabilitation Centers," U.S. Department of Health, Education, and Welfare. Prepared by Rehabilitation Facilities Staff, in collaboration with Division of Statistics and Studies, Office of Vocational Rehabilitation, February 27, 1961. The study was conducted through the membership of the Association of Rehabilitation Centers, Inc.

Table 10.—Ratio of Budgeted-Unfilled Positions (B.U.P.) to Total Positions ¹

INPATIENT CENTERS

Positions	Nursing bed (N=69)				Dormitory bed only (N=8)			
	Total positions	B.U.P.	Ratio of B.U.P. to total	No. centers reporting B.U.P.	Total positions	B.U.P.	Ratio of B.U.P. to total	No. centers reporting B.U.P.
Administrative	116	3.2	1 to 36...	4	20	0	0	0
Nonpatient service	1,909	25.7	1 to 74...	11	184	1.5	1 to 123	2
Medical director	45	2.5	1 to 18	3	2	0	0	0
Physician	212	15.4	1 to 14	13	8	0	0	0
Physical therapy	570	90.0	1 to 6	25	35	5.0	1 to 7	2
Occupational therapy	287	51.0	1 to 6	21	27	4.0	1 to 7	3
Registered nurse	638	46.2	1 to 14	15	6	0	0	0
Prosthetist	6	0	0	0	2	0	0	0
Orthotist	59	0	0	0	0	0	0	0
Nurses aide and orderly	1,194	9.5	1 to 126	8	0	0	0	0
Therapy aide	263	11.0	1 to 24	5	5	0	0	0
Psychologist	71	11.7	1 to 6	13	7	0	0	0
Social worker	130	17.5	1 to 7	12	8	1.0	1 to 8	1
Vocational evaluator	29	4.0	1 to 7	3	17	1.0	1 to 17	1
Vocational counselor	49	3.8	1 to 13	5	12	1.0	1 to 12	1
Vocational teacher	42	3.0	1 to 14	2	26	1.0	1 to 26	1
Workshop foreman	6	1.0	1 to 6	1	18	0	0	0
Speech therapist	90	5.9	1 to 15	6	64	0	0	0
Audiologist	17	.5	1 to 34	1	4	0	0	0

¹ Ratio = $\frac{\text{Filled positions} + \text{B.U.P.}}{\text{B.U.P.}}$

Example: 10 therapists are employed in a center.
2 positions are currently budgeted but unfilled.

ratio = $\frac{10+2}{2} = 1$ to 6 (i.e., for every 6 total therapy positions, there is 1 budgeted but unfilled position.)

Table 10.—Ratio of Budgeted-Unfilled Positions (B.U.P.) to Total Positions—Continued

OUTPATIENT CENTERS (N=53)					TOTAL CENTERS (N=130)			
Positions	Total positions	B.U.P.	Ratio of B.U.P. to total	No. centers reporting B.U.P.	Total positions	B.U.P.	Ratio of B.U.P. to total	No. centers reporting B.U.P.
Administrative	103	2.5	1 to 41	3	239	5.7	1 to 42	7
Nonpatient service	386	10.2	1 to 38	4	2,479	37.4	1 to 66	17
Medical director	18	1.5	1 to 12	2	65	4.0	1 to 16	5
Physician	15	.5	1 to 30	1	235	15.9	1 to 15	14
Physical therapy	160	19.0	1 to 8	11	765	114.0	1 to 7	38
Occupational therapy	90	7.1	1 to 13	9	404	62.1	1 to 6	33
Registered nurse	9	0	0	0	653	46.2	1 to 14	15
Prosthetist	8	1.0	1 to 8	1	16	1.0	1 to 16	1
Orthotist	5	1.0	1 to 5	1	64	1.0	1 to 64	1
Nurses aide and orderly	5	0	0	0	1,199	9.5	1 to 126	8
Therapy aide	40	3.0	1 to 13	2	308	14.0	1 to 22	7
Psychologist	30	2.1	1 to 14	3	108	13.8	1 to 8	16
Social worker	80	8.7	1 to 9	10	218	27.2	1 to 8	23
Vocational evaluator	41	3.5	1 to 12	3	87	8.5	1 to 10	7
Vocational counselor	42	4.2	1 to 10	5	103	9.0	1 to 11	11
Vocational teacher	31	1.0	1 to 31	1	99	5.0	1 to 20	4
Workshop foreman	82	1.0	1 to 82	1	106	2.0	1 to 53	2
Speech therapist	51	3.9	1 to 13	6	205	9.8	1 to 21	12
Audiologist	5	0	0	0	26	.5	1 to 52	1

Source: Association of Rehabilitation Centers, Inc. Directory of Institutional Members. Evanston, Ill., 1962.

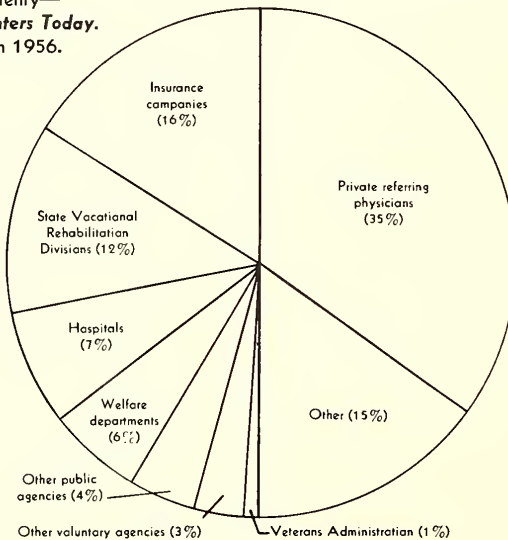
Table 11.—Percent Distribution of Patients by Distance of Patients' Permanent Residences From Center as of the Study Period

Miles patients' residences from center	All centers	Inpatient centers		Outpatient centers	
	Per-cent	Per-cent	Range among centers (per-cent)	Per-cent	Range among centers (per-cent)
Total	100	100	—	100	—
Under 15 miles..	68	38	4-83	88	58-96
15 to 24.....	5	4	0-19	6	2-22
25 to 49.....	5	7	2-20	3	1- 8
50 to 99.....	4	8	2-23	1	0- 4
100 to 250.....	9	22	0-39	1	0- 6
Over 250.....	9	21	0-41	1	0- 2

Source: Mott, Basil J. F. et al. Financing and Operating Rehabilitation Centers and Facilities. National Society for Crippled Children and Adults, Inc., Chicago, 1960.

Chart 1.—Referrals to Centers in One Year¹

Source: Redkey, Henry—
Rehabilitation Centers Today.
Study conducted in 1956.



¹ Based on total annual caseload.

Appendix V

Architectural Plans

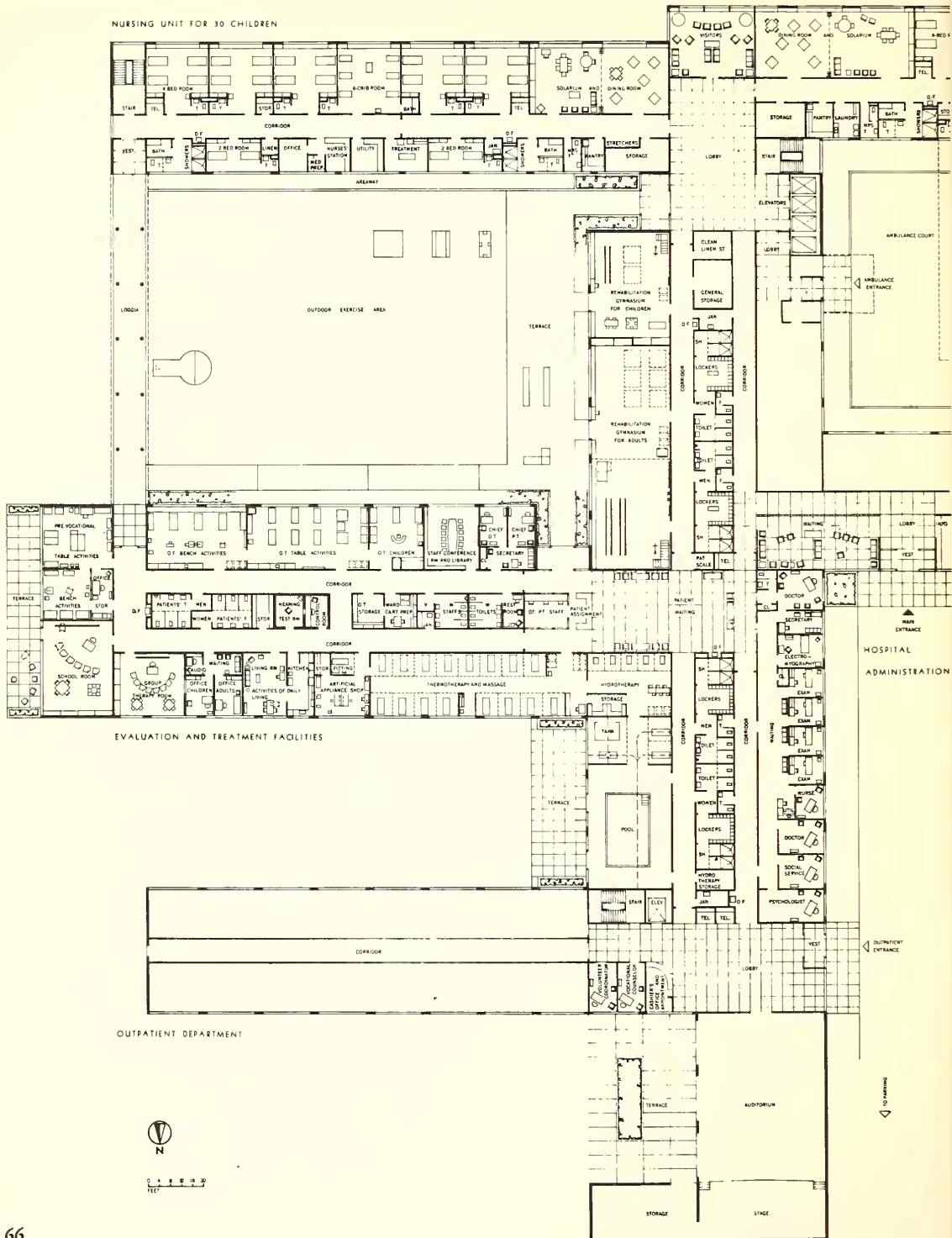
The plans presented on the following pages are examples of the kinds of facilities that will help to provide effective services for the disabled. They may be useful as guides in adapting rehabilitation facilities to meet the requirements of areawide health facility planning.

Plans 1 to 9 are excerpted from "Planning Multiple Disability Rehabilitation Facilities," published by the Public Health Service (19). The remaining plans are from original architects' drawings.

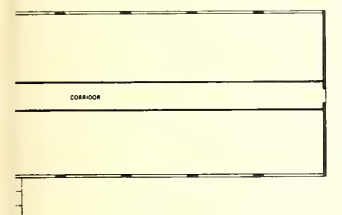
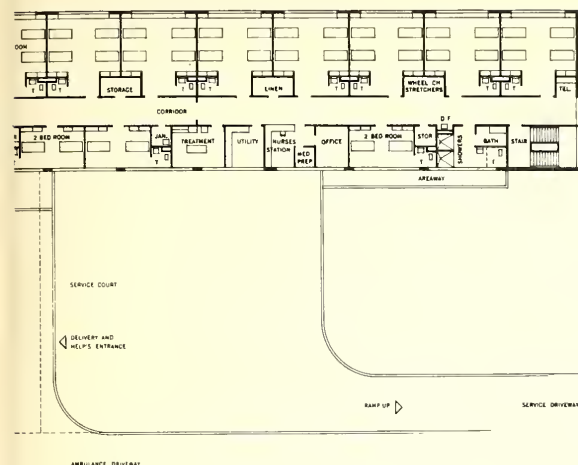
Plan 1. Multiple Disability Rehabilitation

NURSING UNIT FOR 38 ADULTS

NURSING UNIT FOR 30 CHILDREN



Facility including Nursing Unit (Master Plan).



Guidelines for estimating the size of facilities

PHYSICAL THERAPY

1. Percentages of patients treated in physical therapy unit daily—

(a) Rehabilitation inpatients (Treatments on inpatient floors 10 percent)_____percent__	90
(b) Other inpatients (Treatments on inpatient floors 5 percent)_____percent__	5
(c) Outpatients:	
Rehabilitation _____percent__	75
General _____percent__	20
2. Average length of treatment daily:

(a)* Rehabilitation inpatients_____hours__	2
(b)* Other inpatients_____hour__	½ to 1
(c)* Outpatients _____hour__	½ to 1
3. Ratio of staff to patients:

(a) Rehabilitation patients: 7-10 patients to 1 physical therapist and 1 aide.
(b) General medical and surgical patients—15-20 patients to 1 physical therapist and 1 aide.

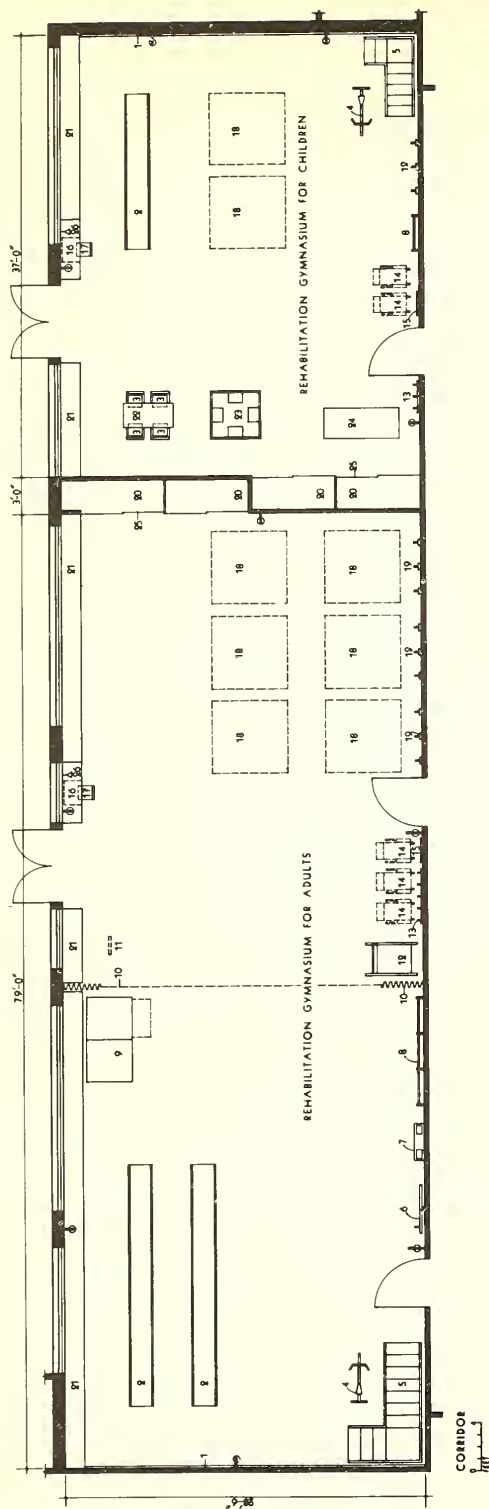
OCCUPATIONAL THERAPY

1. Percentages of patients treated in occupational therapy unit daily—

(a) Rehabilitation inpatients_____percent__	65
(b) Other inpatients (Treatment in inpatient units 18 percent)_____percent__	12
(c) Outpatients:	
Rehabilitation _____percent__	25
General _____percent__	5
2. Average length of treatment_____hour__
3. Ratio of staff to patients:

(a) Rehabilitation patients—15 patients to 1 occupational therapist.
(b) General medical and surgical patients—20 patients to 1 occupational therapist.

*Includes dressing and undressing when required.



Plan 2. Rehabilitation Gymnasiums.

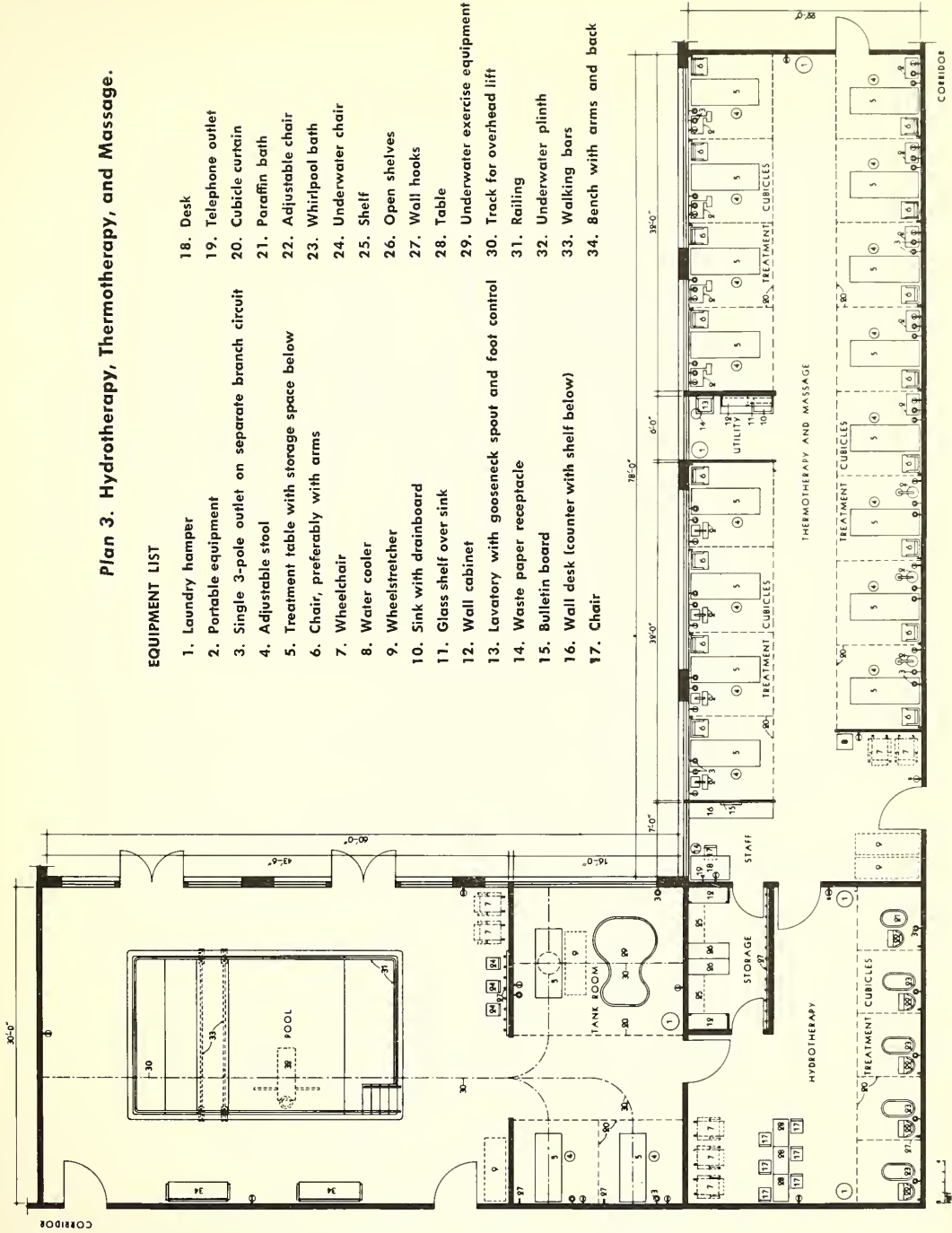
EQUIPMENT LIST

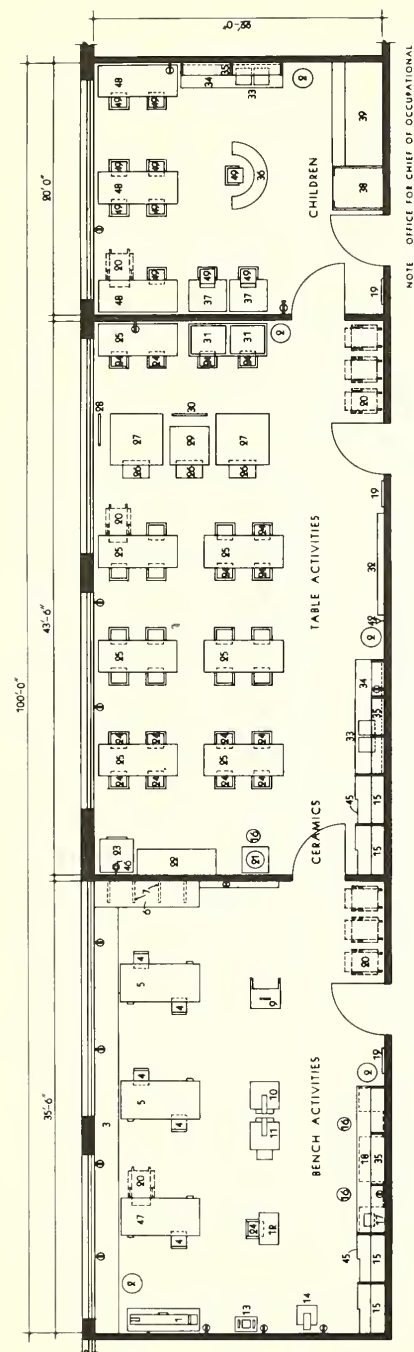
- | | |
|---------------------------------|---|
| 1. Posture mirror | 14. Wheelchair |
| 2. Parallel bars | 15. Bulletin board |
| 3. Child-size chair | 16. Built-in desk with knee space and drawers below |
| 4. Stationary bicycle | 17. Straight chair |
| 5. Steps | 18. Gymnasium mat |
| 6. Shoulder wheel | 19. Gymnasium mat hooks |
| 7. Pulley weights | 20. Storage |
| 8. Stall bars | 21. Counter with storage space below |
| 9. Curbs and ramp | 22. Table, adjustable height |
| 10. Folding partition | 23. Multiple place stand-in table |
| 11. Cervical traction apparatus | 24. Treatment table with storage space below |
| 12. Tilt table | 25. Sliding doors |
| 13. Wall hooks | 26. Telephone outlet |

Plan 3. Hydrotherapy, Thermotherapy, and Massage.

EQUIPMENT LIST

1. Laundry hamper
2. Portable equipment
3. Single 3-pole outlet on separate branch circuit
4. Adjustable stool
5. Treatment table with storage space below
6. Chair, preferably with arms
7. Wheelchair
8. Water cooler
9. Wheelstretcher
10. Sink with drainboard
11. Glass shelf over sink
12. Wall cabinet
13. Lavatory with gooseneck spout and foot control
14. Waste paper receptacle
15. Bulletin board
16. Wall desk (counter with shelf below)
17. Chair
18. Desk
19. Telephone outlet
20. Cubicle curtain
21. Paraffin bath
22. Adjustable chair
23. Whirlpool bath
24. Underwater chair
25. Shelf
26. Open shelves
27. Wall hooks
28. Table
29. Underwater exercise equipment
30. Track for overhead lift
31. Railing
32. Underwater plinth
33. Walking bars
34. Bench with arms and back

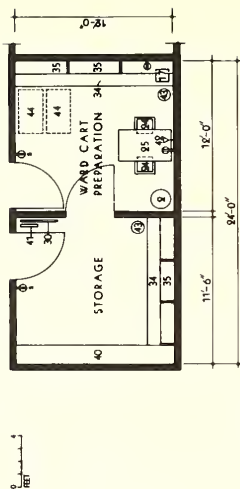




Plan 4. Occupational Therapy.

EQUIPMENT LIST

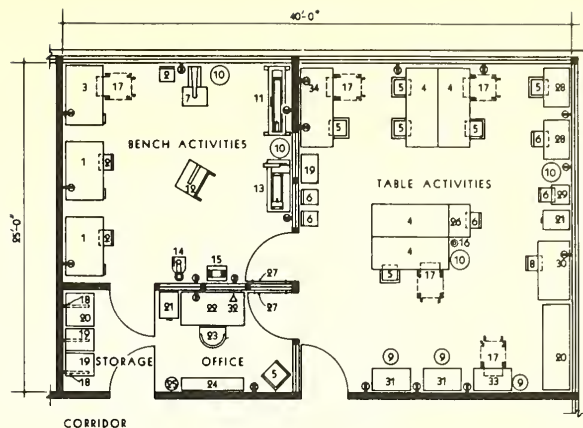
1. Woodworking lathe
2. Waste receptacle
3. Counter with open shelf below
4. Adjustable height swivel chair
5. Two-man workbench
6. Lumber rack
7. Wall bracket
8. Shadow board cabinet
9. Eight-inch tilting arbor power saw
10. Electric jig saw
11. Bicycle jig saw
12. Treadle sander
13. Pedestal type grinder
14. Floor model drill press
15. Storage cabinet
16. Stool
17. Double element hot plate
18. Counter with drawers and cabinets below
19. Bulletin board
20. Wheelchair
21. Potter's wheel
22. Counter with cabinets and damp closet below
23. Kiln
24. Chair with arms
25. Flat-top table
26. Bench for floor loom
27. Large floor loom
28. Warping board
29. Small floor loom
30. Weave frame
31. Table loom
32. Gadget board
33. Double compartment sink
34. Counter with drawers and open shelf below
35. Wall cabinets
36. Circular table, adjustable height
37. Cut-out table, adjustable height
38. Playhouse
39. Sandbox
40. Shelving
41. Ironing board
42. Telephone outlet
43. Step stool
44. Ward cart
45. Sliding doors
46. Single 3-pole outlet on separate branch
47. Two-man workbench for patients in wheelchairs
48. Flat-top table, adjustable height
49. Child-size chair with arms



Plan 5. Prevocational Units.

EQUIPMENT LIST

1. Woodworking bench with vise
2. Adjustable height swivel chair
3. Woodworking bench with vise for patient in wheelchair
4. Flat-top wood table
5. Chair with arms
6. Straight chair
7. Electric jig saw
8. Posture chair
9. Stool
10. Waste receptacle
11. Woodworking lathe
12. Eight-inch tilting arbor power saw
13. Metal lathe on bench
14. Floor model drill press
15. Pedestal type grinder
16. Electric outlet, floor type
17. Wheelchair
18. Wall bracket above cabinets
19. Tool storage cabinet
20. General storage cabinet
21. File cabinet
22. Desk with drawers
23. Swivel chair arms
24. Bookcase with adjustable shelves
25. Waste paper receptacle

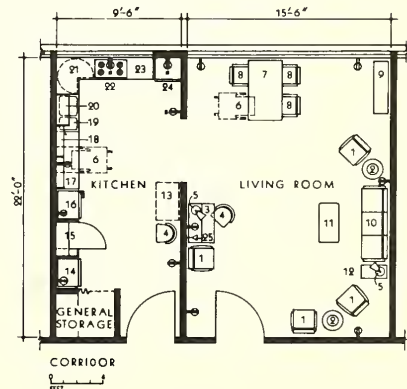


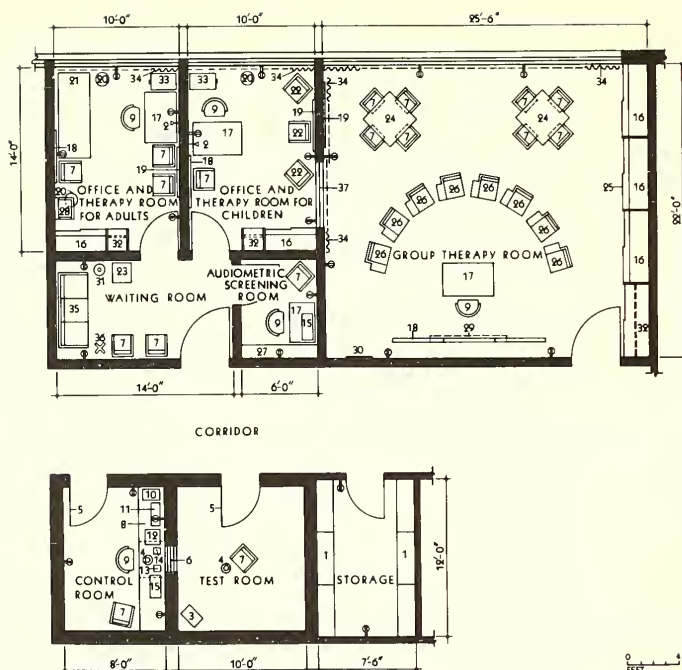
26. Electric sewing machine
27. Door, upper panel clear wire glass
28. Tilt-top art table
29. Typewriter stand
30. Typewriter desk with drawers
31. Watchmaker's bench
32. Telephone outlet
33. Watchmaker's bench for patient in wheelchair
34. Electrical testing bench for patients in wheelchair

Plan 6. Activities of Daily Living.

EQUIPMENT LIST

1. Easy chair with arms
2. Floor lamp
3. Desk
4. Posture chair
5. Table lamp
6. Wheelchair
7. Dining table
8. Chair with arms
9. Bookcase
10. Settee
11. Low table
12. End table
13. Wheeltable
14. Automatic washer and dryer
15. Utility closet
16. Refrigerator
17. Counter with drawers and cupboards below
18. Shelving (6 inches deep)
19. Two-compartment sink with knee space below shallow compartment
20. Shelving (12 inches deep)
21. Counter with revolving shelves below
22. Range in counter
23. Counter with drawer and tray compartments below
24. Built-in oven
25. Telephone outlet

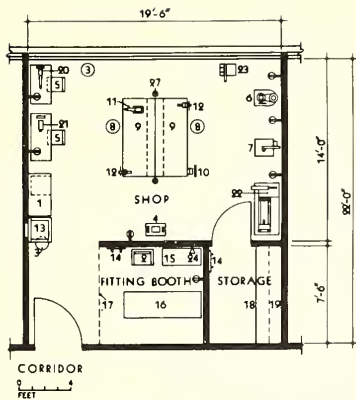




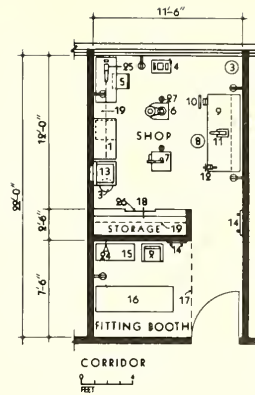
Plan 7. Suggested Layout for Hearing and Speech Facilities.

EQUIPMENT LIST

- | | |
|---|---|
| 1. Shelving | 19. Mirror |
| 2. Telephone outlet | 20. Waste paper receptacle |
| 3. Speaker cabinet | 21. Couch |
| 4. Microphone | 22. Child-size chair with arms |
| 5. Insulated door | 23. End table |
| 6. Observation window | 24. Table |
| 7. Chair with arms | 25. Sliding doors |
| 8. Continuous counter with knee space and storage below | 26. Chair, student type |
| 9. Swivel chair | 27. Shelf, 3 feet high with storage space below |
| 10. Amplifier | 28. Lavatory |
| 11. Tape recorder | 29. Projection screen |
| 12. Phonograph equipment | 30. Bulletin board |
| 13. Decibel meter | 31. Floor lamp |
| 14. Talk-back receiver | 32. Coat closet |
| 15. Pure tone and speech audiometer | 33. File cabinet |
| 16. Storage cabinet | 34. Sliding curtain |
| 17. Desk with drawers | 35. Settee |
| 18. Chalkboard | 36. Costumer |
| | 37. Observation window (one-way glass) |



Type A Plan



Type B Plan

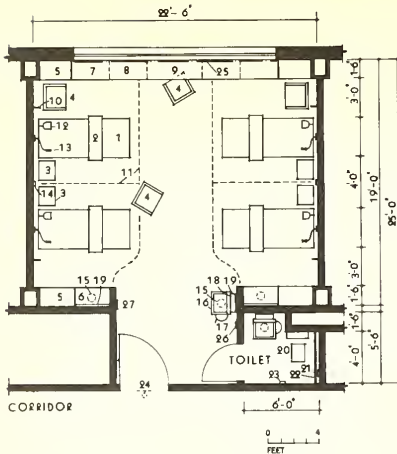
Plan 8. Artificial Appliance Facilities.

EQUIPMENT LIST

1. Counter with plaster bins and drawers below
2. Chair with arms
3. Waste paper receptacle
4. $\frac{3}{4}$ -h.p. pedestal-type buffer and grinder
5. Straight chair
6. 14-inch floor-type drill press
7. 14-inch wood and metal cutting band saw
8. Stool
9. Workbench, 30 inches by 72 inches, wood top, $2\frac{1}{2}$ inches thick, open tool racks above, drawers and enclosed shelves below
10. 11lb vise
11. 50-lb. blacksmith's anvil
12. $4\frac{1}{2}$ -inch heavy-duty swivel vise
13. Lavatory with plaster trap below and medicine cabinet above
14. Hook strip
15. Desk with drawers, 20 inches by 36 inches, 30 inches high
16. Treatment table, 24 inches by 72 inches, 31 inches high
17. Curtain rod and curtain
18. Counter with drawers and enclosed shelving below
19. Shelving
20. Foot-operated patching machine
21. Heavy-duty sewing machine with flat bed
22. 9-inch screw cutting metal lathe with 42-inch bed, on bench with drawers and enclosed shelves below
23. Metal cutting shears, floor type
24. Telephone outlet
25. Combination patching and heavy-duty sewing machine with removable flat bed
26. Sliding doors
27. Electric outlet, floor type

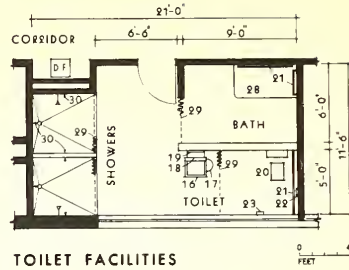
Plan 9. Typical 4-Bed Room and Toilet Facilities.

TYPICAL
4-BED ROOM



EQUIPMENT LIST

1. High-low hospital bed
2. Over-bed table
3. Bedside table
4. Arm chair
5. Built-in locker
6. Built-in dresser
7. Drawers below window sill
8. Shelves below window sill
9. Open below window sill
10. Wall bracket for braces and crutches
11. Cubicle curtain
12. Bed light
13. Nurses' calling station



TOILET FACILITIES

14. Telephone outlet duplex receptacle and 1 phase, 3 wire, 20 amp., 125 v. receptacle
15. Wall bracket light, switch controlled
16. Lavatory with gooseneck spout and hot and cold water controls
17. Waste paper receptacle
18. Shelf
19. Mirror
20. Water closet with bedpan lugs and bedpan flushing attachment
21. Continuous grab bar
22. Paper holder
23. Nurses' calling station (push button type)
24. Corridor dome light
25. Sliding window curtain
26. Duplex receptacle
27. Night light, switch controlled
28. Bathtub
29. Curtain
30. Vertical handrails

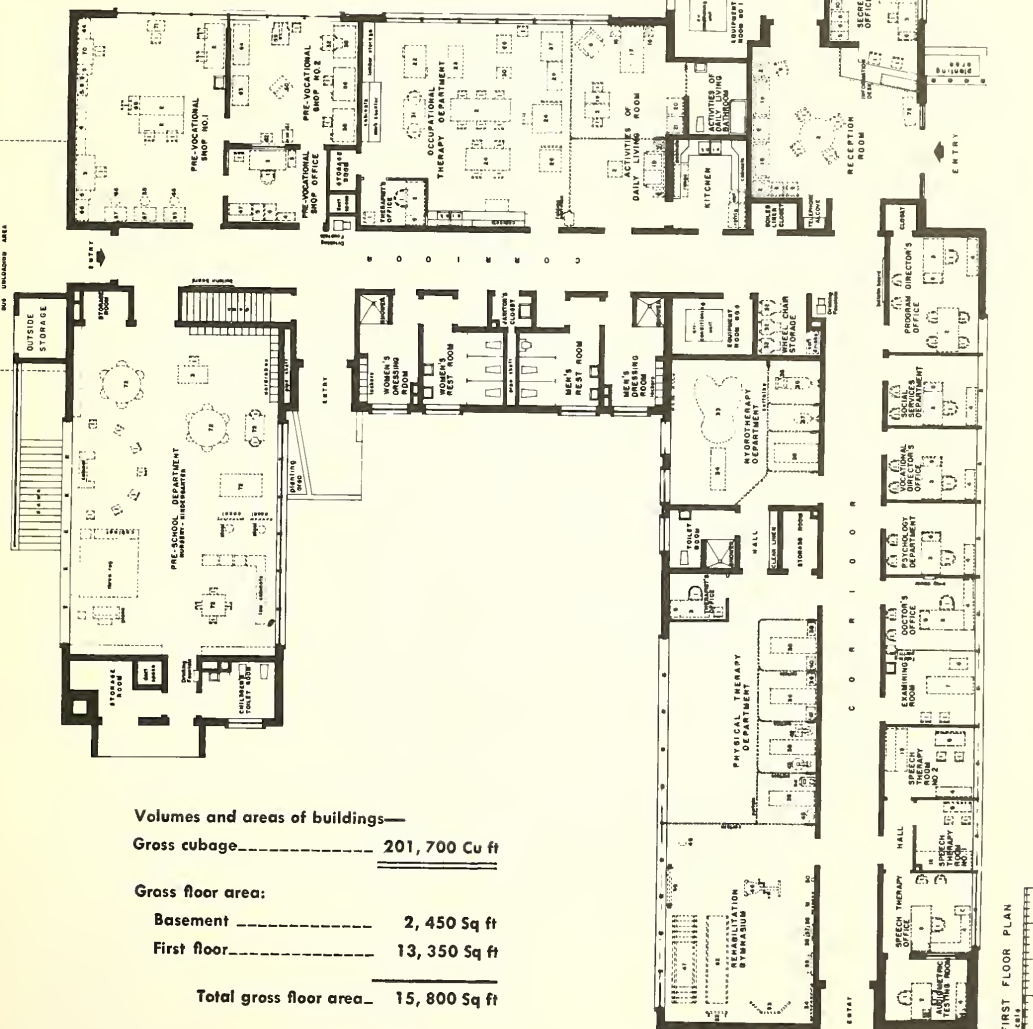
Plan 10. Rehabilitation Center, Evansville, Ind. Owner: Vanderburgh County Society for Crippled Children and Adults, Inc. Architects: Greubel & Saletta. General Contractor: Bauer Brothers General Contractors, Inc.

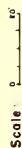
EQUIPMENT LIST

- | | | |
|--|-------------------------------|---------------------------------|
| 1. Chair | 13. Special equipment cabinet | 27. Printing press |
| 2. Table | 14. Speaker | 28. Tool storage and work bench |
| 3. Desk | 15. Built-in treatment table | 29. Composing table |
| 4. Bookcase | 16. Night stand | 30. Type cabinet |
| 5. Filing cabinet | 17. Bed | 31. Cut-out table |
| 6. Easy chair | 18. Vanity | 32. Wheelchair |
| 7. Examining table | 19. Divan | 33. Treatment tank |
| 8. Treatment cart | 20. Washer | 34. Wheel stretcher |
| 9. Table with tilting mirror | 21. Dryer | 35. Arm, leg, and hip bath |
| 10. Master control cabinet for intercommunication system and public address system | 22. Woodworking bench | 36. Mobile chair |
| 11. Central dictating machine | 23. Alexander bicycle jig saw | 37. Arm tank |
| 12. Audiometer | 24. Table 22 inches high | 38. Treatment table |
| | 25. Table loom | 39. Treatment stand |
| | 26. Floor loom | 40. Diathermy unit |

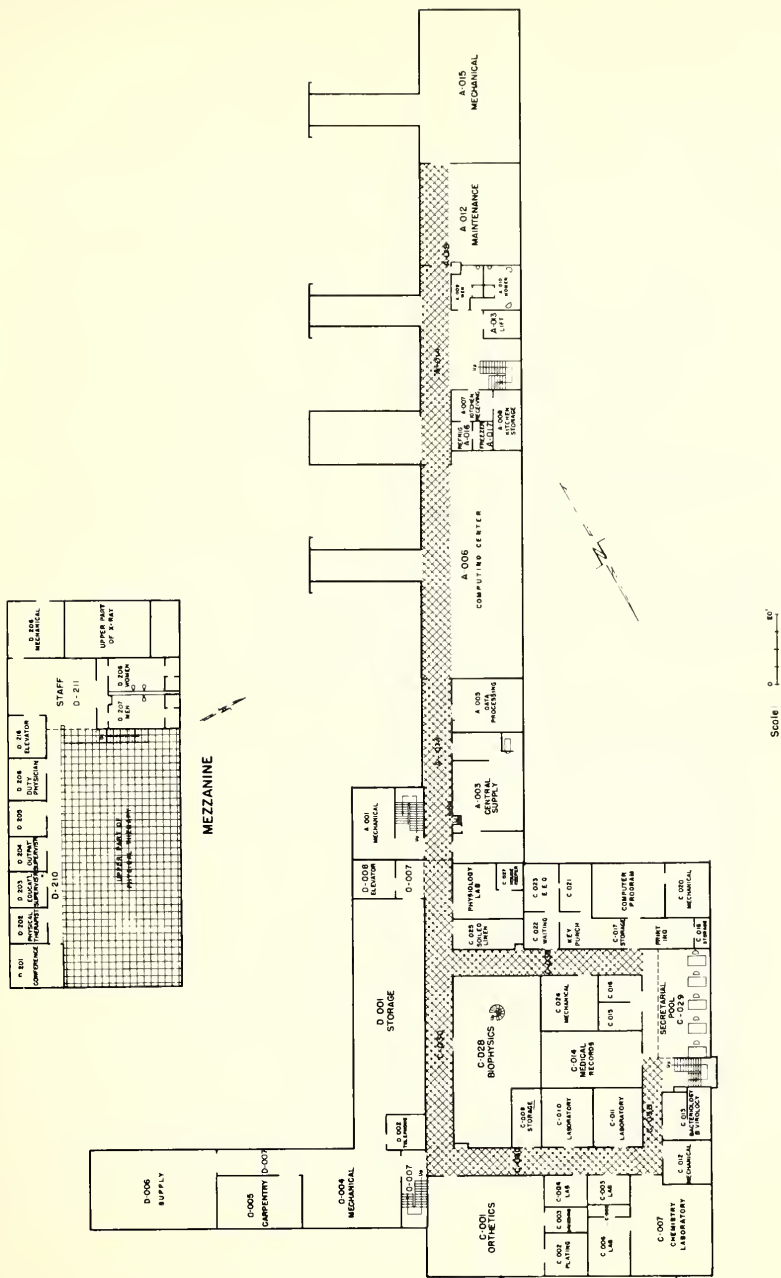
41. Ultra sound unit
42. Ultra violet lamp
43. Infra red lamp
44. Lake side cart, galvanic unit, and electric stimulator
45. Paraffin bath
46. Gymnasium mats
47. Training stair
48. Exercise bicycle
49. Vertical traction
50. Finger ladder
51. Shoulder wheel
52. Parallel bars
53. Mirror
54. Ladder bars
55. Wall pulleys
56. Rotary wrist friction machine

57. Medicine ball
58. Woodworking bench with vise
59. Jig saw
60. Circle saw
61. Drill press
62. Grinder
63. Metal lathe on bench
64. Woodworking lathe
65. Watchmaker's bench
66. General storage cabinet
67. Drawing table
68. Adjustable height swivel chair
69. Sewing machine
70. Printing machine
71. Typewriter stand
72. Play table and chairs
73. Padded bench



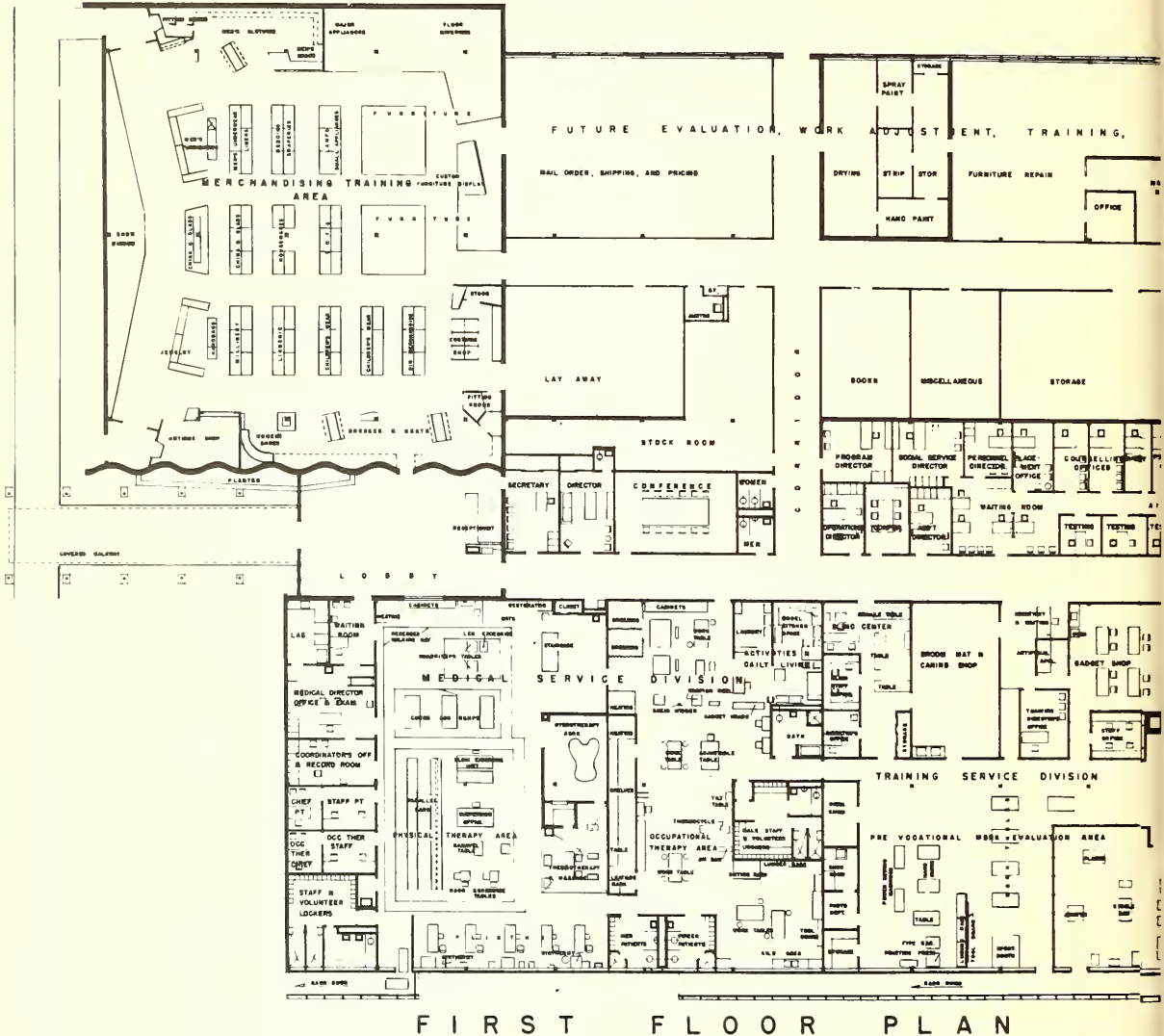


Plan 12. Texas Institute for Rehabilitation and Research (in the Texas Medical Center), Houston, Tex.—Basement Floor.
Architects: Wilson, Morris, Crain & Anderson.

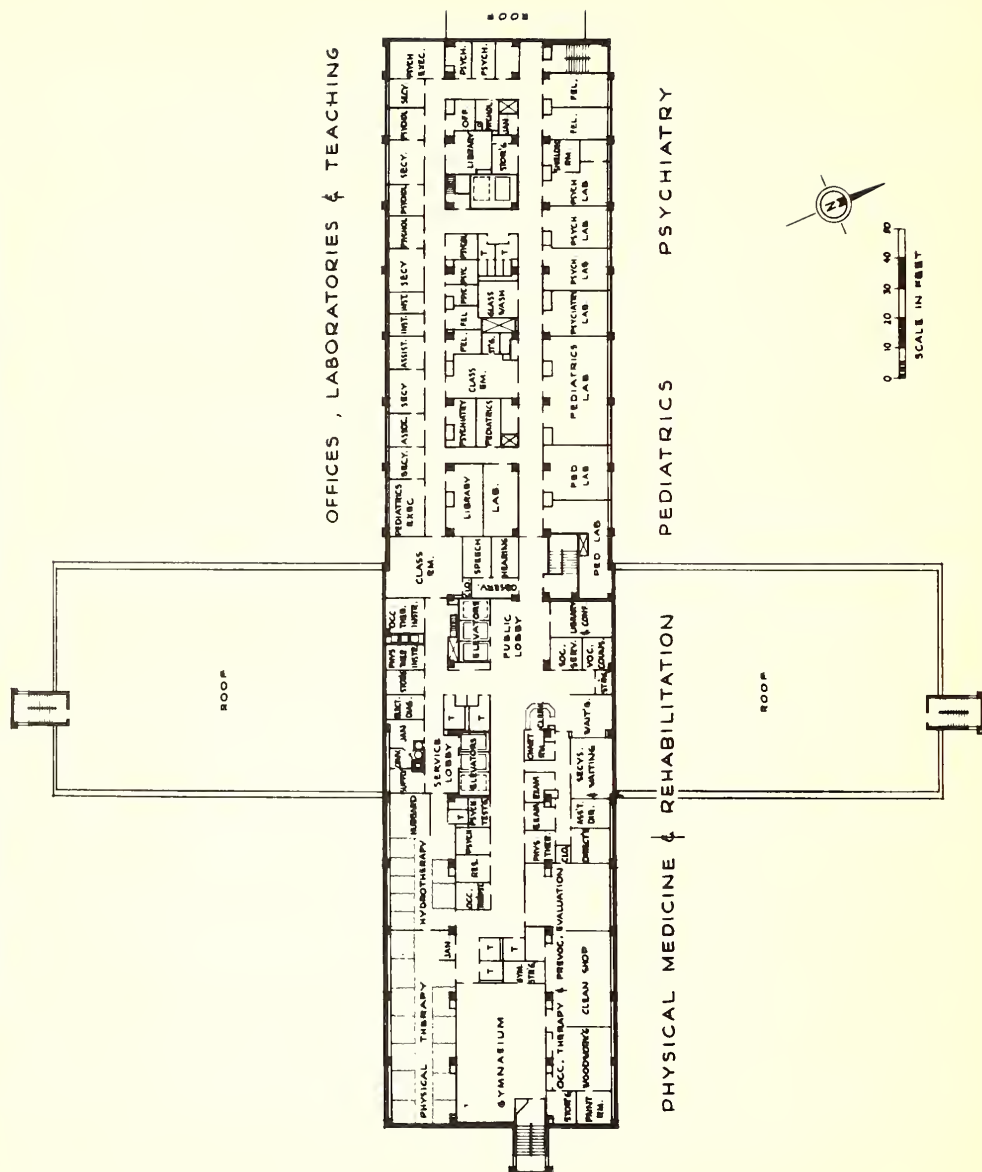


Plan 13. Ohio Valley Goodwill Industries Rehabilitation Center,

A community rehabilitation center providing comprehensive rehabilitation services to the adult handicapped in the 21-county area of Ohio, Indiana, Kentucky surrounding metropolitan Cincinnati. The Center also provides a program which is designed to meet the medical, psychological, social, and vocational needs of the disabled. An In-Residence program serves those coming from outside the immediate service area. The services listed on page 79 are rendered by the various service departments:

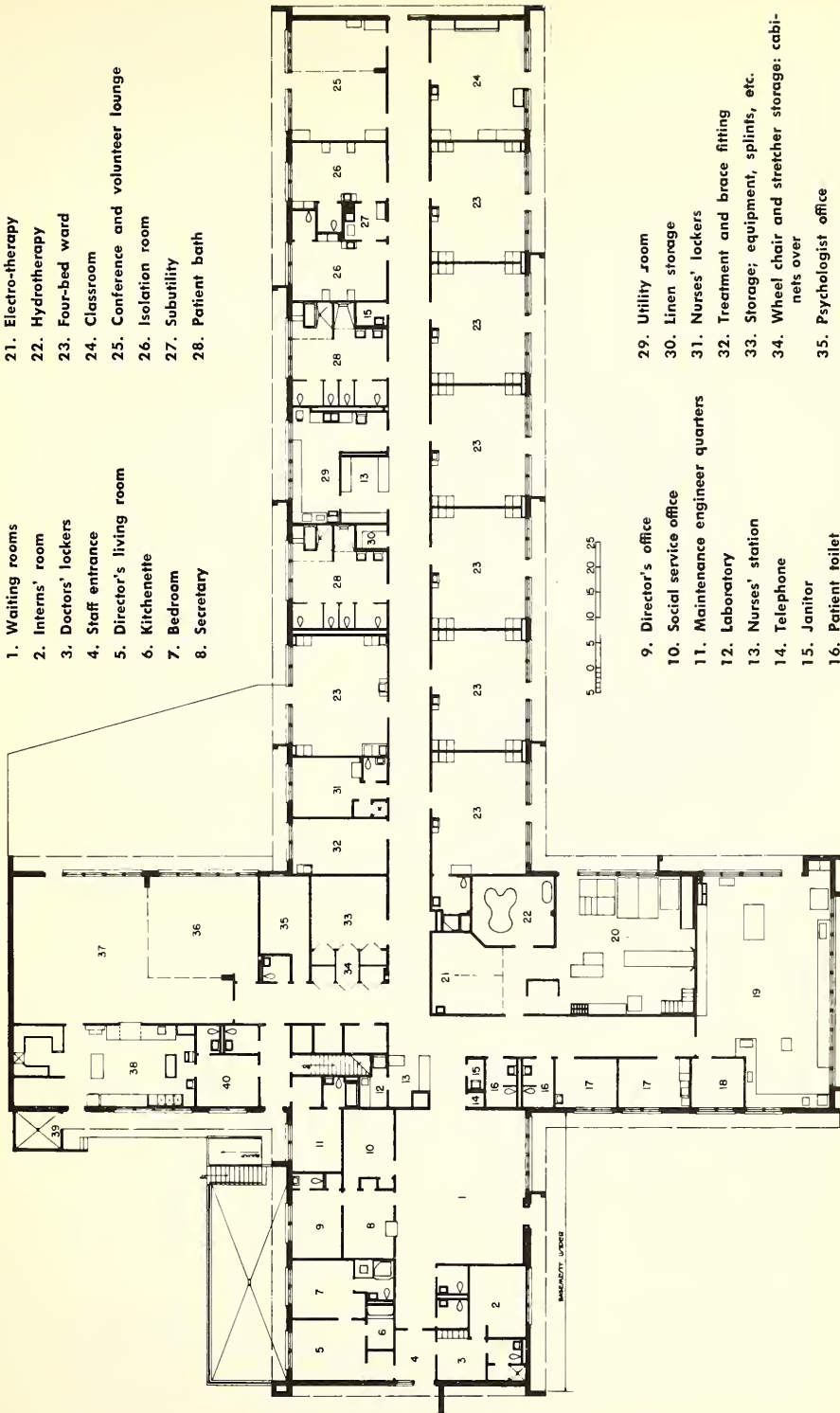


FIRST FLOOR PLAN



LIST OF ROOMS

- | | |
|---------------------------|---------------------|
| 1. Waiting rooms | 21. Electro-therapy |
| 2. Interns' room | 22. Hydrotherapy |
| 3. Doctors' lockers | 23. Four-bed ward |
| 4. Staff entrance | 24. Classroom |
| 5. Director's living room | 25. Conference and |
| 6. Kitchenette | 26. Isolation room |
| 7. Bedroom | 27. Subutility |
| 8. Secretary | 28. Patient bath |



- | | |
|-----------------------------------|--|
| 9. Director's office | 29. Utility room |
| 10. Social service office | 30. Linen storage |
| 11. Maintenance engineer quarters | 31. Nurses' lockers |
| 12. Laboratory | 32. Treatment and brace fitting |
| 13. Nurses' station | 33. Storage; equipment, splints, etc. |
| 14. Telephone | 34. Wheel chair and stretcher storage: cabinets over |
| 15. Janitor | 35. Psychologist office |
| 16. Patient toilet | 36. and 37. Solarium—dining—multipurpose room |
| 17. Examining rooms | 38. Kitchen |
| 18. Office and guidance | 39. Trash room |
| 19. Occupational therapy | 40. Help's dining room |
| 20. Physical therapy | |

Note: Basement contains mechanical equipment, help's lockers and storage rooms.

Appendix VI

Glossary of Terms

Rehabilitation: Process of reestablishment of the disabled person's capacity to sense and participate in his environment and communicate with others; to adapt to the physical world, which includes ability to tolerate physical energy expenditure while resuming activities of daily living; and to utilize fully his intellectual, social, and vocational potentialities (2).

Disabled Person: "An individual who has a physical or mental condition which, to a material degree, limits, contributes to limiting, or if not corrected, will probably result in limiting, the individual's performance or activities to the extent of constituting a substantial physical, mental, or vocational handicap." (20)

Rehabilitation Facility: "An administrative organizational entity in a prescribed physical locale, which is established and operated for the specific purpose of providing one or more rehabilitative services." (21)

Rehabilitation Program: "Broad plans of procedure initiated and carried out by groups of individuals not directly concerned with the details of rendering a service in some specific area of rehabilitation but rather with the planning and organization incident to rehabilitation generally, either on a comprehensive or specialized basis." (22)

Rehabilitation Services in Rehabilitation Centers (23): The following have been used to identify, in general terms, the principle services in a Rehabilitation Center:

Medical Services

Physical and Medical Evaluation: The actual examination of the patient and review of his medical needs, with special reference to the disabling condition, confirmation of the diagnosis, and the prognosis for physical restoration. Physical and medical evaluations are usually performed by Board-certified or Board-eligible specialists in the areas of physical medicine, orthopedics, pediatrics, internal medicine, or neurology.

Medical Consultation: The availability, on call, of appropriate medical specialists for consultation with medical personnel of the center on specific cases.

Psychiatric Screening: Examination by a psychiatrist to determine whether there is mental and/or emotional involvement affecting the rehabilitation program and, if there is, to recommend how these problems should be handled in relation to the patient's rehabilitation program.

Medical Supervision: Actual oversight and control on the premises of all medical aspects of the rehabilitation program, by a physician licensed to practice medicine or surgery. Includes prescription for medical services and the direction of medical therapies such as physical and occupational therapy. Some few centers permit such supervision by a prescribing physician who is in the community but not on the premises.

Physical Therapy: The administration of medically prescribed activities and procedures utilizing the restoration properties of physical agents and exercises to correct or alleviate disabilities resulting from neuromuscular or orthopedic dysfunction, in order to develop the patient's functional capacities to the greatest degree possible. Performed by registered physical therapists.

Occupational Therapy: The administration of medically prescribed activities utilizing creative, manual, and industrial arts, media, and techniques, designed to assist in the physical and mental restoration of disabled persons. Performed by registered occupational therapists.

Speech Therapy: The instruction and supervision of patients in exercises designed to help them overcome deficiencies in speech resulting from any type of disability. May include speech pathology for the diagnosis of speech disorders. Usually practiced by trained therapists and sometimes, but not always, under medical supervision.

Audiological: The services of audiologists in diagnosing and treating deficiencies in hearing and the results thereof, including the prescription of prostheses, lipreading, auditory training, and speech correction and development.

Recreational Therapy: Activity of a recreational type, under medical supervision, intended to benefit the patient physically, socially, or emotionally.

Psychiatric Treatment: The services of a psychiatrist or services prescribed by him and performed by psychologists and psychiatric social workers for the purpose of improving the disabled person's mental or emotional health and susceptibility to other rehabilitation procedures.

Nursing: The care of patients requiring assistance in performing demands of daily living and in carrying out the physician's orders for their medical treatment, including bedside nursing. Often performed by both registered and practical nurses, but always under medical supervision. In some instances, performed by nurses with special training in rehabilitation nursing.

Prosthetics: The measuring for and fitting of prosthetic devices, such as limbs and braces, by training prosthetists under medical supervision. Some, but not all, prosthetists in centers are certified. May include in some instances the manufacture of such devices.

Psychological and Social Services

Psychological Evaluation: The service of a psychologist in testing and evaluating skills, aptitudes, interests, and other psychological factors in making an estimate of the disabled person's rehabilitation potential.

Personal Adjustment Counseling: The service of a psychologist in helping a disabled person to understand, accept, and remedy conditions or attitudes which interfere with his rehabilitation. Performed in consultation with or under supervision of a psychiatrist.

Group Therapy: The practice of counseling with several individuals at one time to improve their functioning in rehabilitation, with the purpose of taking advantage of group interaction.

Social Evaluation: The collection of information of a social nature from the disabled person, his family, and others, and the appraisal of such information to draw conclusions regarding the disabled person's rehabilitation potential.

Social Casework: The process of working with individuals to facilitate their rehabilitation through solution or amelioration of problems growing out of their relationships to others, particularly those most influential in their social environment. Practiced in centers by trained social workers, often medical social workers, and sometimes by psychiatric social workers.

Social Group Work: The practice of using planned group activities for the purpose of furthering social adjustment. Sometimes practiced in centers by trained social group workers and sometimes not.

Recreation, Nonmedical: The provision of recreational and diversional activities for the constructive use of leisure time to build morale, to measure socialization, and to introduce or reintroduce the elements of community living.

Vocational Services

Vocational Evaluation: The process of collecting and appraising information on the disabled person's work history, education, and physical condition for the purpose of determining the possibilities of employment. Performed by vocational counselors.

Vocational Counseling: The process of working with the disabled person to help him understand his vocational liabilities and assets, and the supplying of occupational information for the purpose of helping him to choose an occupation suitable to his interests and abilities. Often practiced in centers by rehabilitation counselors borrowed from the State Vocational Rehabilitation agency.

Prevocational Experience: The supplying of opportunity under supervision for the disabled person to work on a variety of job samples in a simulated work atmosphere, for the purpose of revealing aptitudes and interests.

Special Education: The supplying, often through cooperation with public school officials, of schooling under regular teachers for school-age children residing in the center during prolonged treatment. In some instances, it may also include education of adults in basic subjects related to vocational adjustment.

Vocational Training: Systematic planned instruction to qualify for immediate employment in the trade or occupation in which training was received. Frequently rendered in close collaboration with vocational schools when located adjacent to the center.

Placement: The direct finding of jobs for disabled persons. Also involves in many instances intensified liaison with vocational rehabilitation and employment agencies.

Sheltered Workshop: "A work-oriented rehabilitation facility with controlled working environment and individualized vocational goals, which utilizes work experience and related services for assisting the handicapped person to progress toward normal living in a productive vocational status." (24)

Coordinated Services: "An integrated program brings together as a team specialized personnel from the (i) medical, and (ii) psychological, social or vocational areas for the purpose of pooling information, interpretations and opinions for the development of a rehabilitation plan of services in which the disabled individual is viewed as a whole. When members of the team contribute to the diagnosis and treatment of illness, their contributions must be coordinated under medical responsibility. These integrated services may be provided in a facility to care for many types of disabilities or a single type of disability." (20)

Third-Party Payer: An agency which assumes financial responsibility for providing rehabilitation services to certain disabled individuals. Such an agency does not itself administer the rehabilitation services purchased. In the case of an insurance company, specific services may be purchased and the payment may be on an indemnity basis, in which case a specified number of days of care within a maximum cost is provided.

References

- (1) U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Hospital and Medical Facilities. *Areawide Planning for Hospitals and Related Health Facilities. Report of the Joint Committee of the American Hospital Association and Public Health Service.* PHS Publication No. 855. Washington, D.C., U.S. Government Printing Office, July 1961. 56 pp.
- (2) Spencer, W. A., M.D., et al., "Rehabilitation in Concept and Practice." Presented in part at the Southern Medical Association Meeting, November 8, 1961.
- (3) Roberts, Dean W., M.D., "Evolution of the Rehabilitation Center Concept," in *The Planning of Rehabilitation Centers.* Papers Presented at the Institute on Rehabilitation Center Planning, February 25-March 1, 1957, Chicago, Ill. Washington, D.C., U.S. Government Printing Office, 1957, p. 13.
- (4) Berch, George R., Unpublished M.A. thesis on "Nature and Extent of Rehabilitation Services in General Hospitals." Richmond, Medical College of Virginia, 1962.
- (5) Mott, Basil J. F.; Kovener, Ronald R.; and Mergle, Max A., *Basic Accounting Procedures for Rehabilitation Centers and Facilities.* A Guide for Management and Staff. Chicago, National Society for Crippled Children and Adults, Inc., 1960. 54 pp.
- (6) Mott, Basil J. F.; Kovener, Ronald R.; and Mergle, Max A., *Cost Accounting, Budgeting and Statistical Procedures for Rehabilitation Centers and Facilities.* A Guide for Management and Staff. Chicago, National Society for Crippled Children and Adults, Inc., 1960. 79 pp.
- (7) Mott, Basil J. F. et al. *Financing and Operating Rehabilitation Centers and Facilities.* Chicago, National Society for Crippled Children and Adults, Inc., 1960, pp. 27-28.
- (8) *Ibid.*, p. 20.
- (9) Caniff, Charles E., "Estimated Financial Resources for Support of the Center," in *Planning of Rehabilitation Centers*, p. 88. See reference (3).
- (10) Association of Rehabilitation Centers, Inc., *1962 Directory of Institutional Members.* Evanston, Illinois, 1962.
- (11) U.S. Department of Health, Education, and Welfare, Office of Vocational Rehabilitation. "Medical and Related Services in Rehabilitation Centers." Washington, D.C., February 27, 1961. Mimeographed.
- (12) Mott, Basil J. F. et al. *Financing and Operating Rehabilitation Centers*, p. 36. See reference (7).
- (13) *Ibid.*, p. 60.
- (14) Redkey, Henry, *Rehabilitation Centers Today.* A Report on the Operations of 77 Centers in the United States and Canada. Rehabilitation Service Series No. 490. Washington, D.C., U.S. Government Printing Office, 1959, p. 68.
- (15) Report of the Committee on Rehabilitation, *Journal of the American Medical Association*, 164: 2045, August 31, 1957.
- (16) U.S. Department of Health, Education, and Welfare, Public Health Service, National

Health Survey. "Chronic Conditions Causing Limitation of Activities, United States, July 1959-61." *Health Statistics*, Series B, No. 36. Washington, D.C., October 1962.

(17) Peterson, Warren A., *Metropolitan Area Health Survey: Kansas City Rehabilitation Experiment*. Community Studies, Inc., Kansas City, Mo., 1959. 319 pp.

(18) The National Health Education Committee, Inc., *Facts on the Major Killing and Crippling Diseases in the United States Today*. New York, 1961.

(19) U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Hospital and Medical Facilities. *Planning Multiple Disability Rehabilitation Facilities*. PHS Publication No. 930-D-6. Washington, D.C., U.S. Government Printing Office, 1962. 44 pp.

(20) U.S. Department of Health, Education, and Welfare, Public Health Service. *Public*

Health Service Regulations—Part 53: Pertaining to Hospital and Medical Facilities Survey and Construction Legislation. PHS Publication No. 930-A-1. Washington, D.C., U.S. Government Printing Office, Revised June 1962, p. 3.

(21) Caniff, Charles E., "Community Planning for Rehabilitation." Summary of a talk presented at Northwest Regional Institute on Rehabilitation and Labor Health Services, University of Washington, Seattle, May 5, 1961.

(22) Allan, W. Scott, *Rehabilitation: A Community Challenge*. New York, John Wiley and Sons, Inc., 1958, p. 21.

(23) Redkey, Henry, *op. cit.*, pp. 33-52. See reference (14).

(24) National Institute on Workshop Standards, *Experimental Evaluative Instrument*. June 1960.

Additional Bibliography

(1) American Association for the Advancement of Science, *Rehabilitation of the Mentally Ill: Social and Economic Aspects*. Edited by Greenblatt, Milton and Simon, Benjamin. Publication No. 58. Washington, D.C., 1959. 250 pp.

(2) Commission on Chronic Illness, *Chronic Illness in the United States*. Cambridge, Mass., Commonwealth Fund.

Vol. I, *Prevention of Long-Term Illness*. 1957. 338 pp.

Vol. II, *Care of the Long-Term Patient*. 1956. 606 pp.

Vol. III, *Chronic Illness in a Rural Area*. 1957. 524 pp.

Vol. IV, *Chronic Illness in a Large City*. 1957. 620 pp.

(3) Haldeman, Jack C., M.D., "Long-Term Care: A Backdrop of Facts." *Hospitals*, 36: 41-45, January 16, 1962.

(4) Salmon, F. Cuthbert, A.I.A., and Salmon, Christine F., A.I.A., *Rehabilitation Center Planning: An Architectural Guide*. University Park, Pennsylvania, The Pennsylvania State University Press. 1959. 164 pp.

(5) ———, ———, *Supplement 1958*. University Park, Pennsylvania, The Pennsylvania State University Press. 1959. 26 pp.

(6) U.S. Department of Health, Education, and Welfare, Office of Vocational Rehabilitation. *Directory of Workshops for the Handicapped 1961*. Washington, D.C., 98 pp.

(7) U.S. Department of Health, Education, and Welfare. *The Planning of Rehabilitation Centers*. Papers Presented at the Institute on Rehabilitation Center Planning, February 25-March 1, 1957, Chicago, Ill. Washington, D.C., U.S. Government Printing Office, 1957. 322 pp.

(8) U.S. Department of Health, Education, and Welfare, Public Health Service. *Planning of Facilities for Mental Health Services: Report of the Surgeon General's Ad Hoc Committee on Planning for Mental Health Facilities*. PHS Publication No. 808. Washington, D.C., U.S. Government Printing Office, January 1961. 55 pp.

(9) U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Hospital and Medical Facilities. *Hill-Burton State Plan Data: A National Summary as of January 1, 1962*. PHS Publication No. 930-F-2. Washington, D.C., U.S. Government Printing Office, 1962. 90 pp.

(10) U.S. Congress. "The Community Health Services and Facilities Act of 1961." Public Law 87-395, 87th Congress, H.R. 4998, October 5, 1961. Washington, D.C., U.S. Government Printing Office.

(11) U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Hospital and Medical Facilities. *Areawide Planning of Facilities for Long-Term Treatment and Care*. Report of Joint Committee of the American Hospital Association and the Public Health Service on Planning Facilities for Long-Term Treatment and Care. PHS Publication No. 930-B-1. 1963, 81 pp.

RELATED AD HOC COMMITTEE REPORTS

Previous ad hoc committee reports which are part of the series of publications concerned with hospital and related health facility planning are:

"Planning of Facilities for Mental Health Services," Report of the Surgeon General's Ad Hoc Committee on Planning for Mental Health Facilities. Public Health Service Publication No. 808. January 1961. 55 pp. 40 cents.

"Areawide Planning for Hospitals and Related Health Facilities," Report of the Joint Committee of the American Hospital Association and Public Health Service. Public Health Service Publication No. 855. July 1961. 56 pp. 35 cents.

"Medical School Facilities—Planning Considerations and Architectural Guide," Prepared by the Public Health Service in cooperation with the Ad Hoc Committee on Medical School Architecture of the Association of American Medical Colleges and the American Medical Association. Public Health Service Publication No. 875. October 1961. 185 pp. \$1.00.

"Areawide Planning of Facilities for Long-Term Treatment and Care," Report of the Joint Committee of the American Hospital Association and the Public Health Service. Public Health Service Publication No. 930-B-1. 1963.

Free single copies of the above publications are available from:
Division of Hospital and Medical Facilities,
Public Health Service,
U.S. Department of Health, Education, and Welfare,
Washington 25, D.C.

The publications may be purchased at the above-cited prices from:
The Superintendent of Documents,
U.S. Government Printing Office,
Washington 25, D.C.

Public Health Service Publication No. 930-B-2